CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE SOUTH FORK HOLSTON RIVER WATERSHED

4.1. BACKGROUND. This chapter is organized by HUC-10 subwatershed, and the description of each subwatershed is divided into four parts:

i. General description of the subwatershed
ii. Description of point source contributions
ii.a. Description of facilities discharging to water bodies listed on the 1998 303(d) list
iii. Description of nonpoint source contributions

The South Fork Holston River Watershed (HUC 06010102) has been delineated into four HUC 10-digit subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 1.1 beta (developed by Tetra Tech, Inc for EPA Region 4) released in 2000.

WCS integrates with ArcView® v3.2 and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

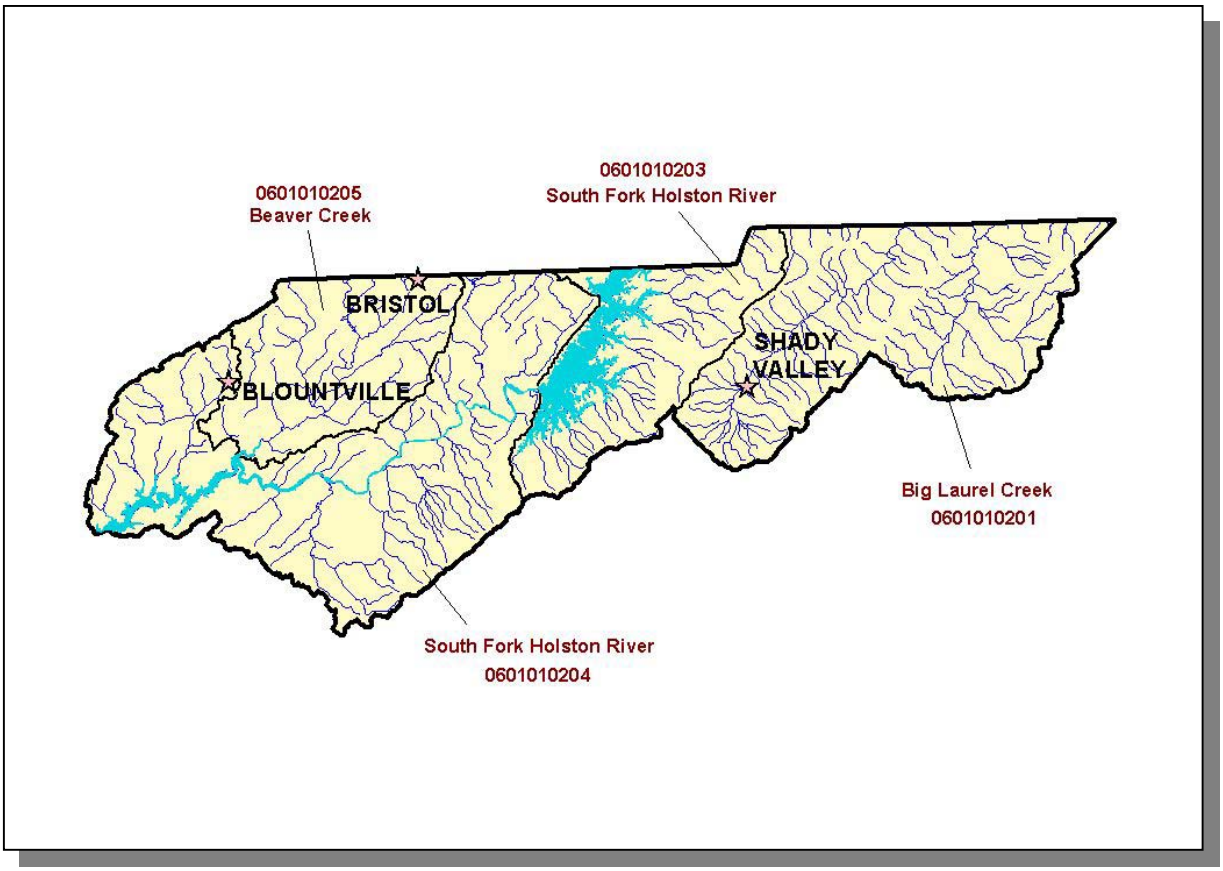

Figure 4-1. The Group 2 Portion of the Tennessee Portion of the South Fork Holston River Watershed is Composed of Four USGS-Delineated Subwatersheds (10-Digit Subwatersheds). *Locations of Blountville, Bristol, and Shady Valley are shown for reference.*

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Group 2 portion of the Tennessee portion of the South Fork Holston River Watershed.

HUC-10	HUC-12
0601010201	060101020103 (Upper Big Laurel Creek)
	060101020104 (Laurel Creek)
	060101020105 (Beaverdam Creek)
	060101020106 (Lower Big Laurel Creek)
0601010203	060101020302 (South Holston lake)
	060101020303 (South Fork Holston River)
0601010204	060101020401 (South Fork Holston River)
	060101020402 (South Fork Holson River)
	060101020403 (Boone Lake)
0601010205	060101020501 (Upper Beaver Creek)
	060101020502 (Lower Beaver Creek)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. *NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.*

4.2.A. 0601010201.

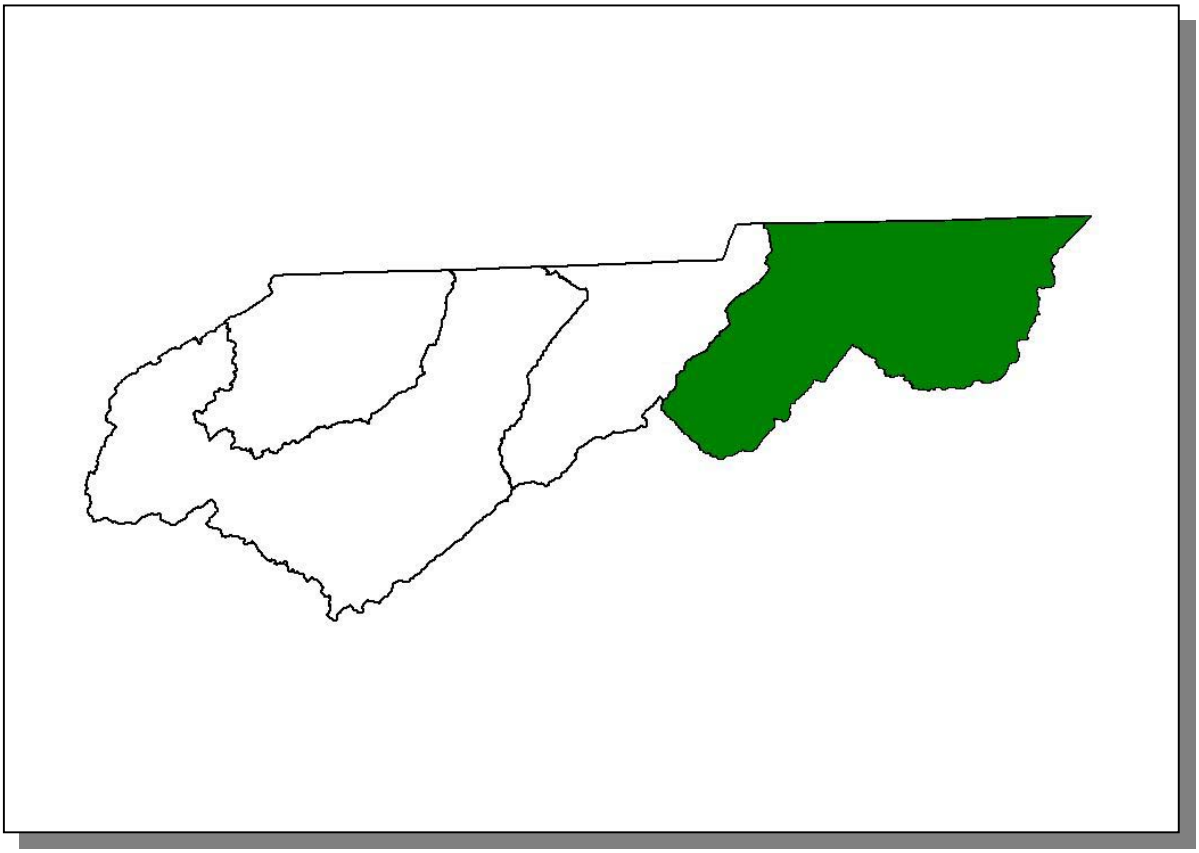

Figure 4-2. Location of Subwatershed 0601010201. *The Group 2 portion of the Tennessee portion of the South Fork Holston HUC-10 subwatershed boundaries are shown for reference.*

4.2.A.i. General Description.

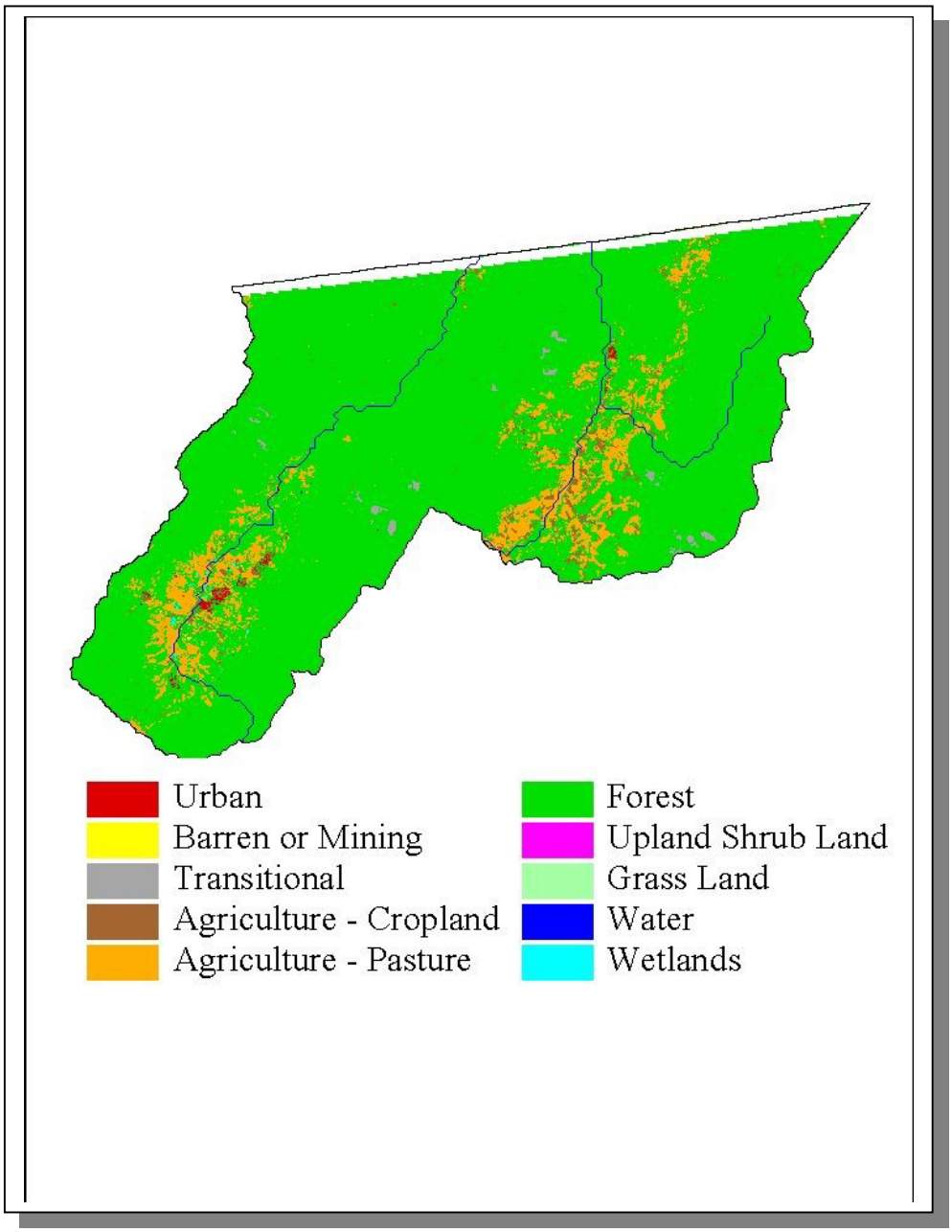

Figure 4-3. Illustration of Land Use Distribution in the Tennessee Portion of Subwatershed 0601010201.

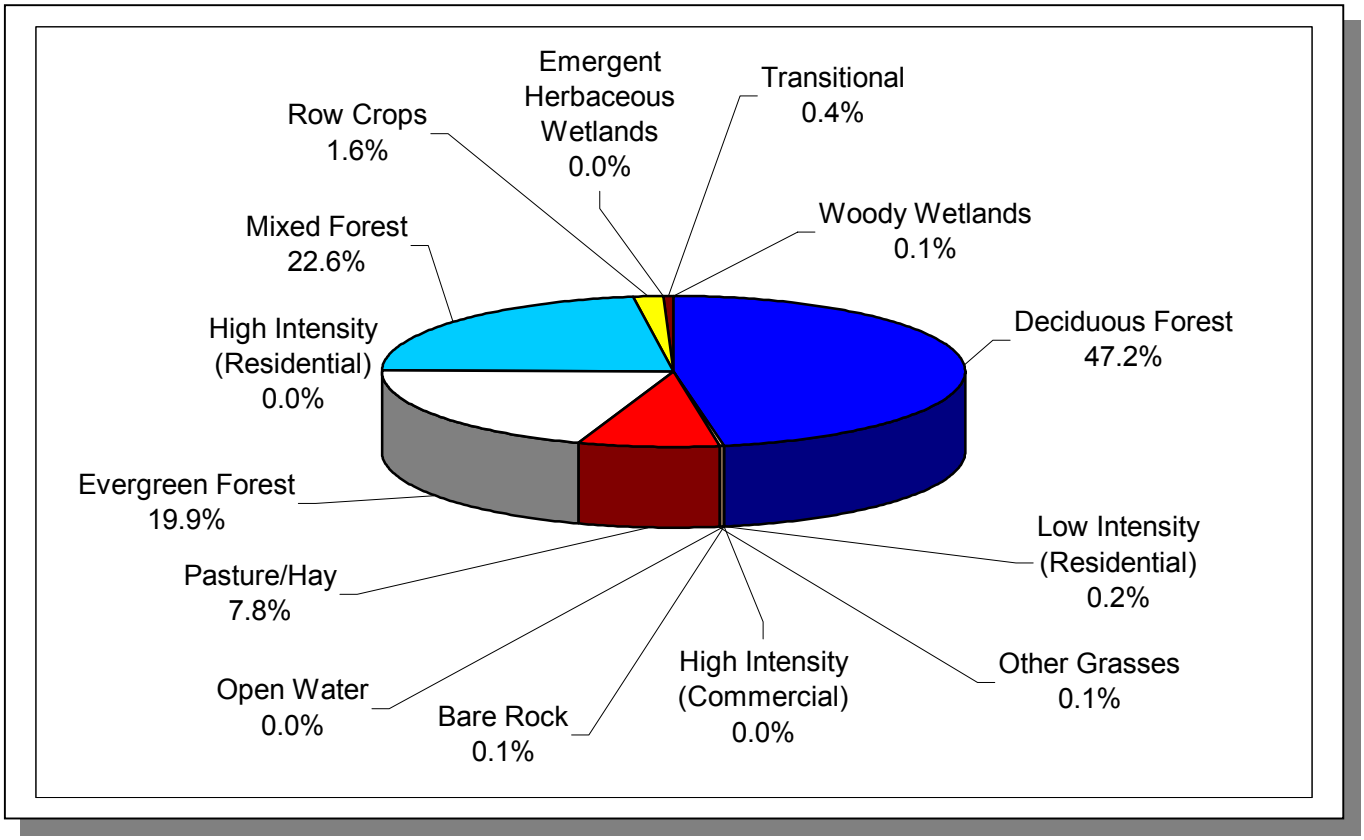

Figure 4-4. Land Use Distribution in Subwatershed 0601010201. *More information is provided in SF Holston-Appendix IV.*

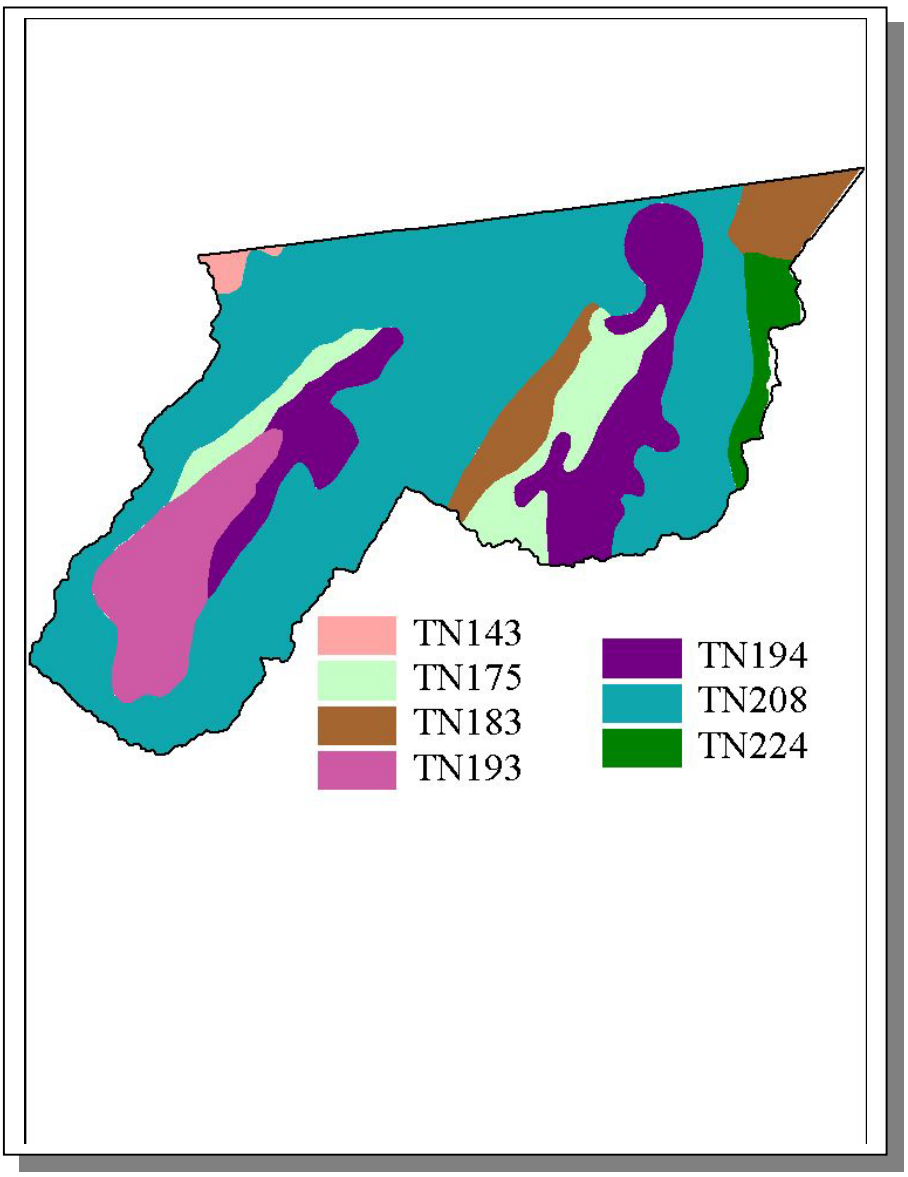

Figure 4-5. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN143	0.00	B	1.22	6.44	Loam	0.32
TN175	0.00	B	1.49	5.23	Loam	0.30
TN183	0.00	B	4.45	5.04	Sandy Loam	0.21
TN193	0.00	B	4.15	5.73	Loam	0.28
TN194	0.00	B	3.75	5.44	Loam	0.28
TN208	0.00	C	4.02	4.84	Loam	0.25
TN224	3.00	B	3.97	5.27	Loam	0.24

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010201. *More details are provided in SF Holston-Appendix IV.*

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Carter	51,505	53,132	0.04	22	22	0.0
Johnson	13,766	16,572	31.11	4,282	5,155	20.4
Sullivan	143,596	150,371	1.33	1,910	2,001	4.8
Total	**208,867**	**220,075**		**6,214**	**7,178**	**15.5**

Table 4-3. Population Estimates in Subwatershed 0601010201.

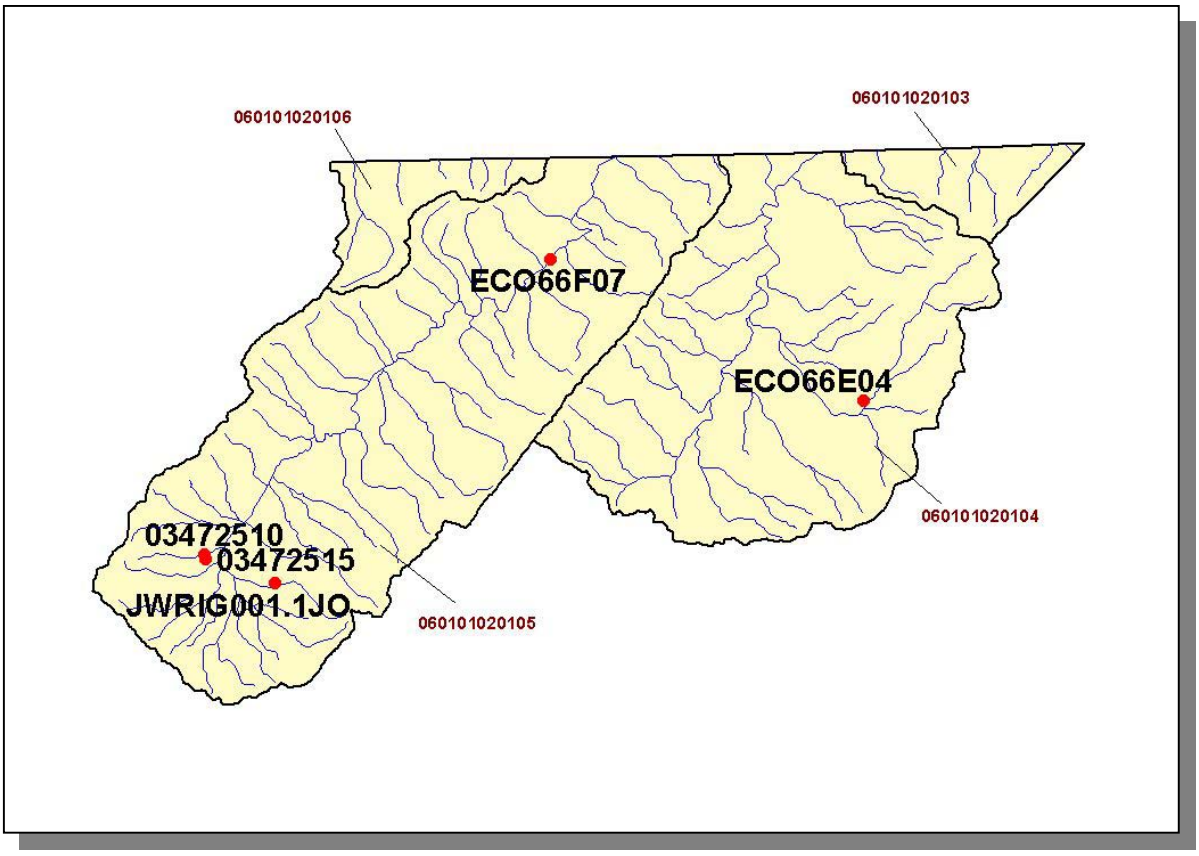

Figure 4-6. Location of Storet Monitoring Sites in Subwatershed 0601010201. *Subwatershed 060101020103, 060101020104, 060101020105, and 060101020306 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

4.2.A.ii. Point Source Contributions.

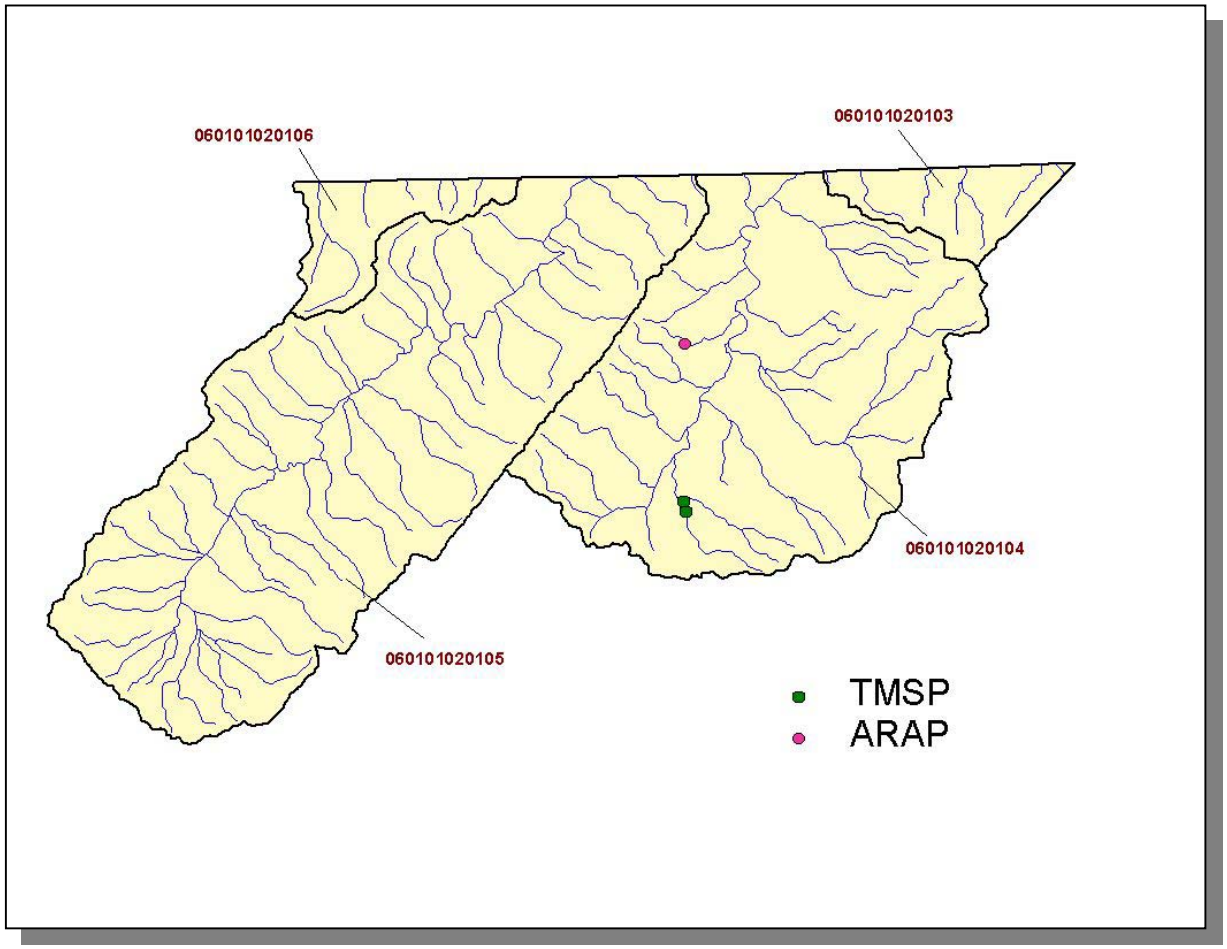

Figure 4-7. Location of Active Point Source Facilities in Subwatershed 0601010201. *Subwatershed 060101020103, 060101020104, 060101020105, and 060101020106 boundaries are shown for reference. More information is provided in the following figures.*

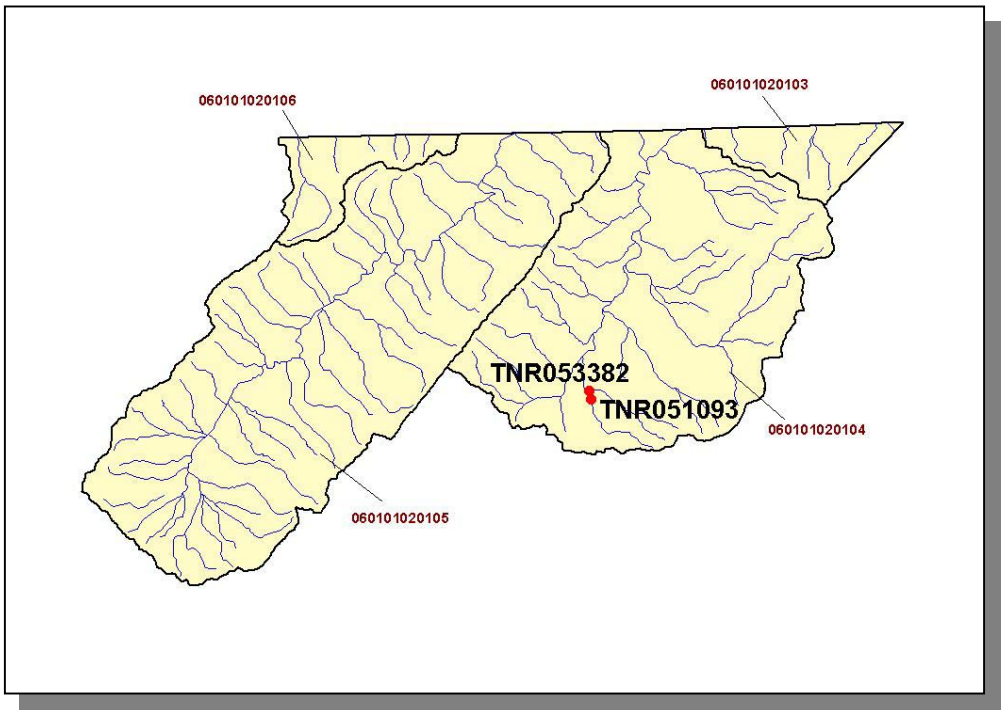

Figure 4-8. Location of TMSP Facilities in Subwatershed 0601010201. *Subwatershed 060101020103, 060101020104, 060101020105, and 060101020106 boundaries are shown for reference. More information, including the names of facilities, is provided in SF Holston-Appendix IV.*

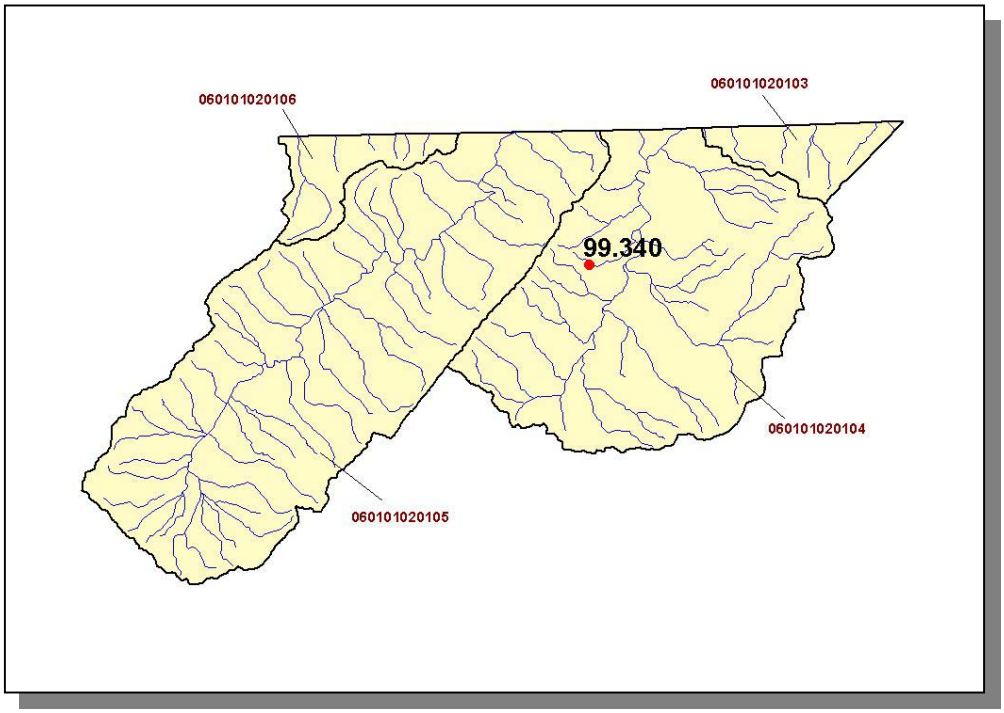

Figure 4-9. Location of ARAP Sites (Individual Permits) in Subwatershed 0601010201. *Subwatershed 060101020103, 060101020104, 060101020105, and 060101020106 boundaries are shown for reference. More information, including the names of facilities, is provided in SF Holston-Appendix IV.*

4.2.A.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)					
Beef Cow	Cattle	Milk Cow	Chickens	Hogs	Sheep
1,118	2,674	130	4	19	42

Table 4-4. Summary of Livestock Count Estimates in Subwatershed 0601010201. *According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.*

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Carter	161.3	155.5	3.4	12.4
Johnson	144.4	144.4	0.6	2.2
Sullivan	123.7	123.7	0.1	0.3
Total	**429.4**	**423.6**	**4.1**	**14.9**

Table 4-5. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 0601010201.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	8.20
Grass (Hayland)	0.52
Legume/Grass (Hayland)	0.16
Grass (Pastureland)	0.74
Grass,Forbs, Legumes (Mixed Pasture)	0.18
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.23
Tobacco (Row Crops)	3.91
Other Farmlands	0.02

Table 4-6. Annual Estimated Total Soil Loss in Subwatershed 0601010201.

4.2.B. 0601010203.

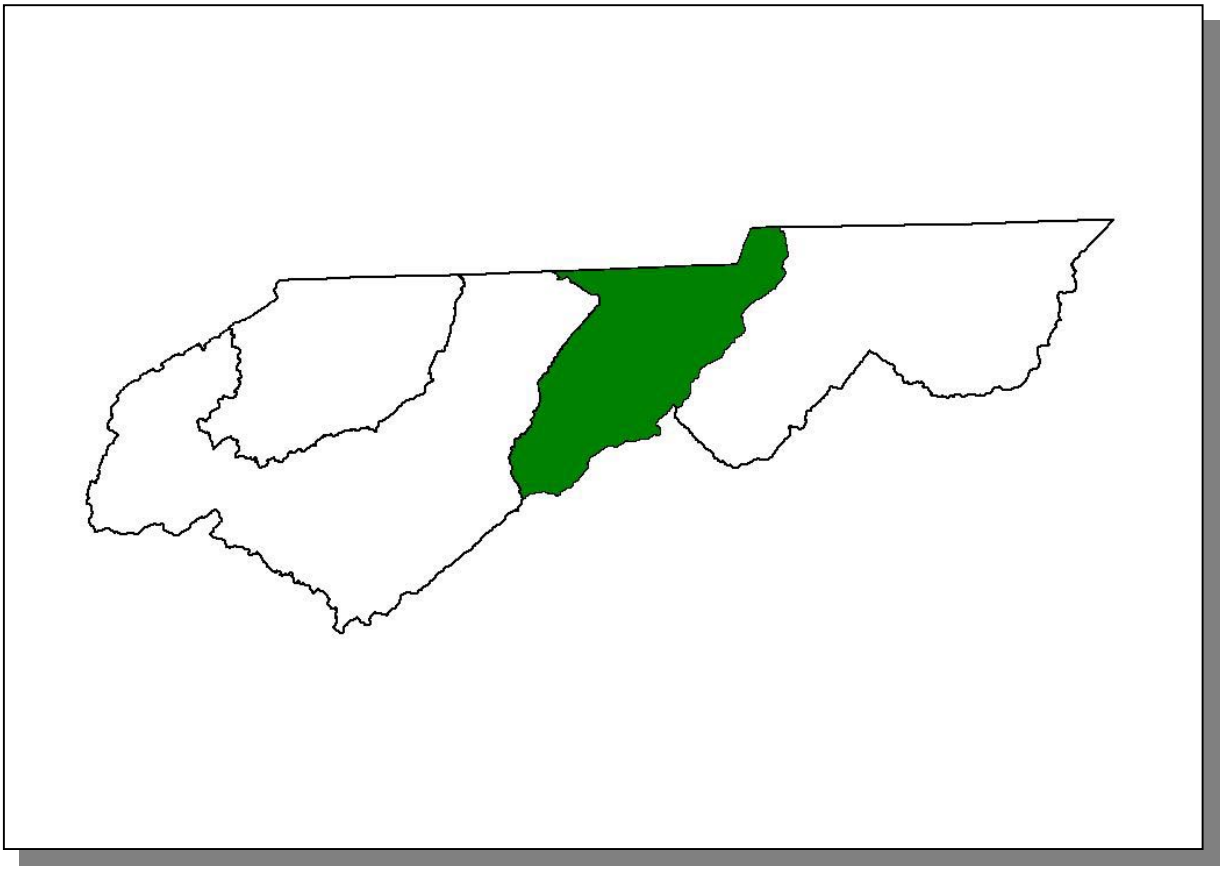

Figure 4-10. Location of Subwatershed 0601010203. *The Group 2 portion of the Tennessee portion of the South Fork Holston HUC-10 subwatershed boundaries are shown for reference.*

4.2.B.i. General Description.

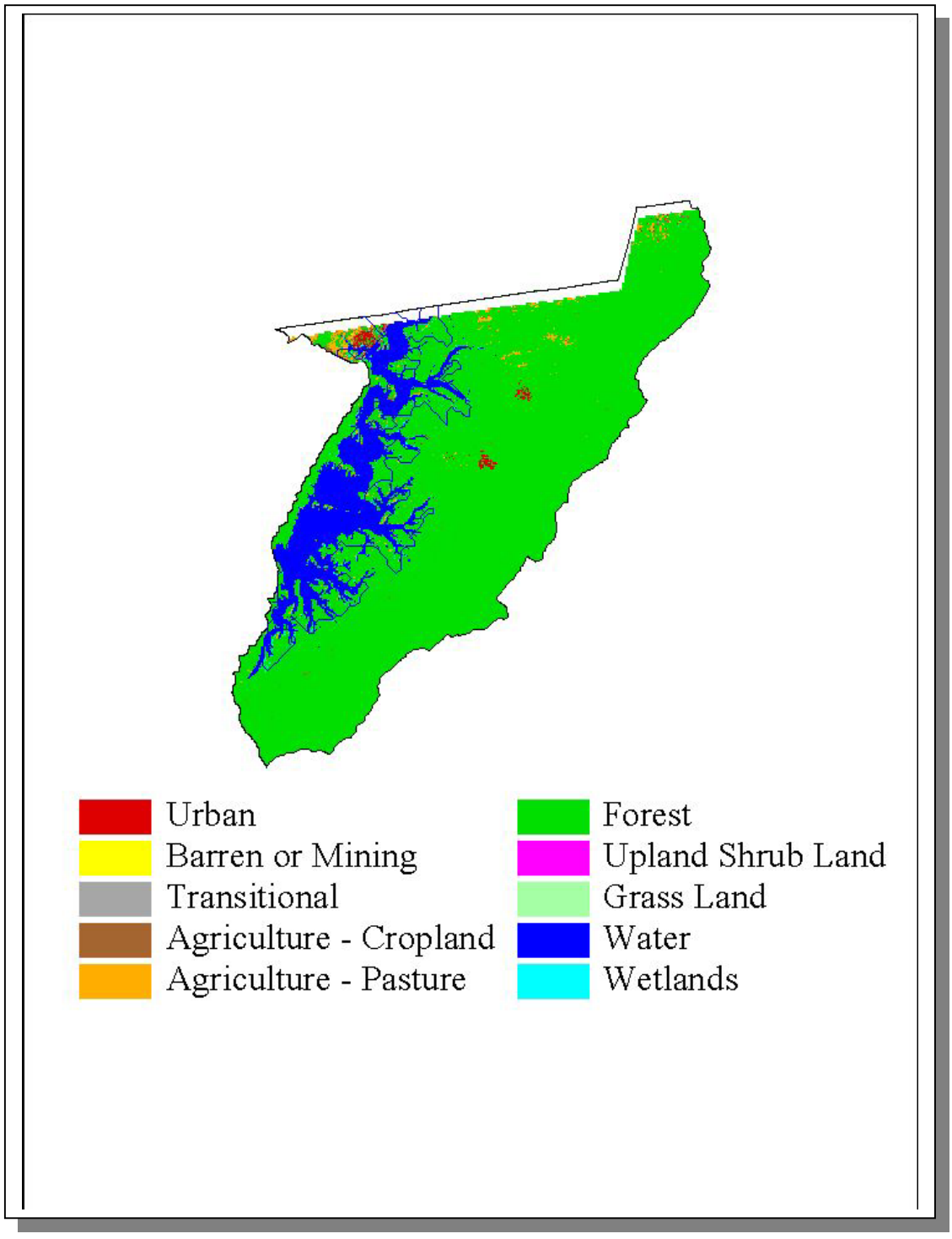

Figure 4-11. Illustration of Land Use Distribution in Subwatershed 0601010203.

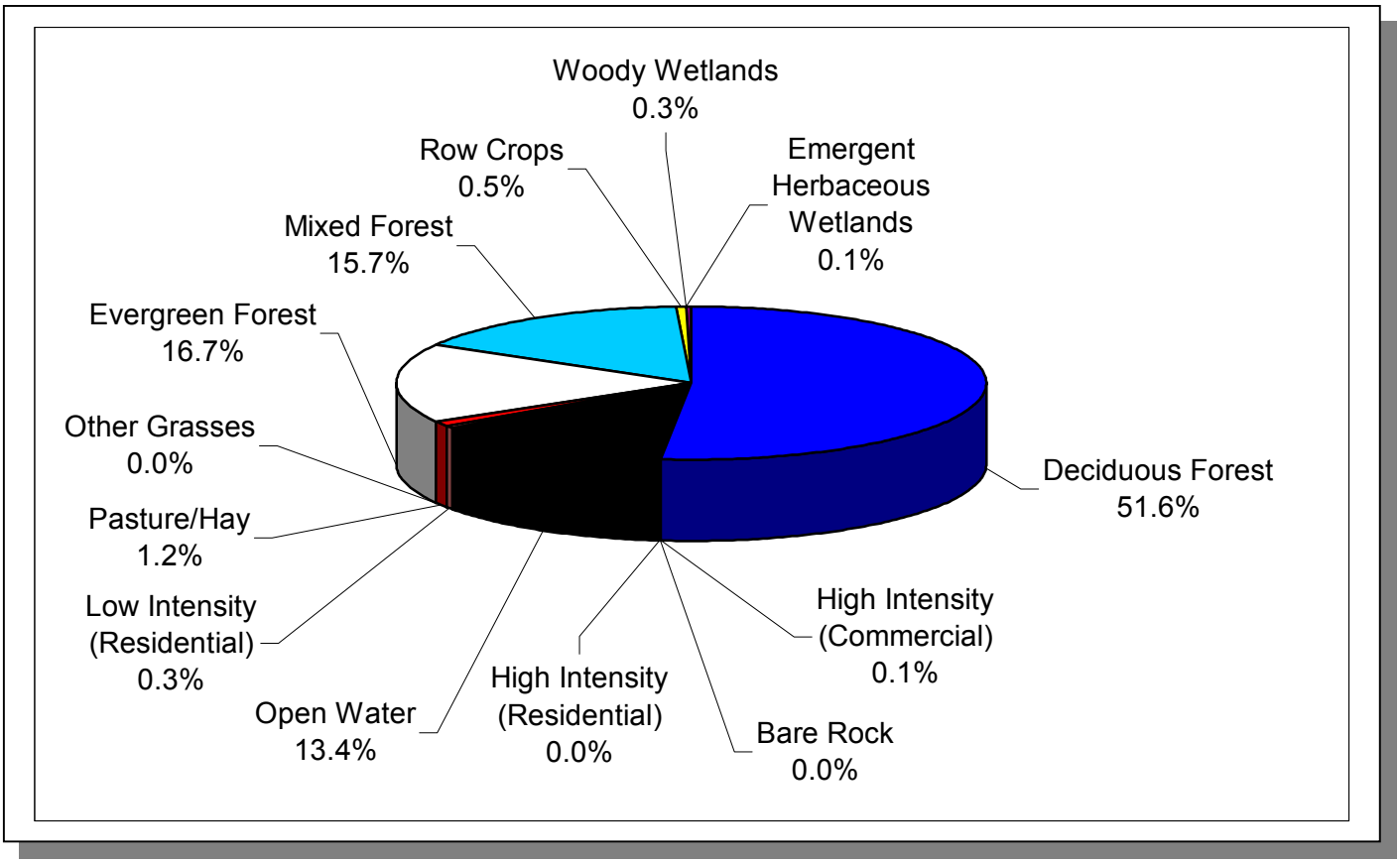

Figure 4-12. Land Use Distribution in Subwatershed 0601010203. *More information is provided in SF Holston-Appendix IV.*

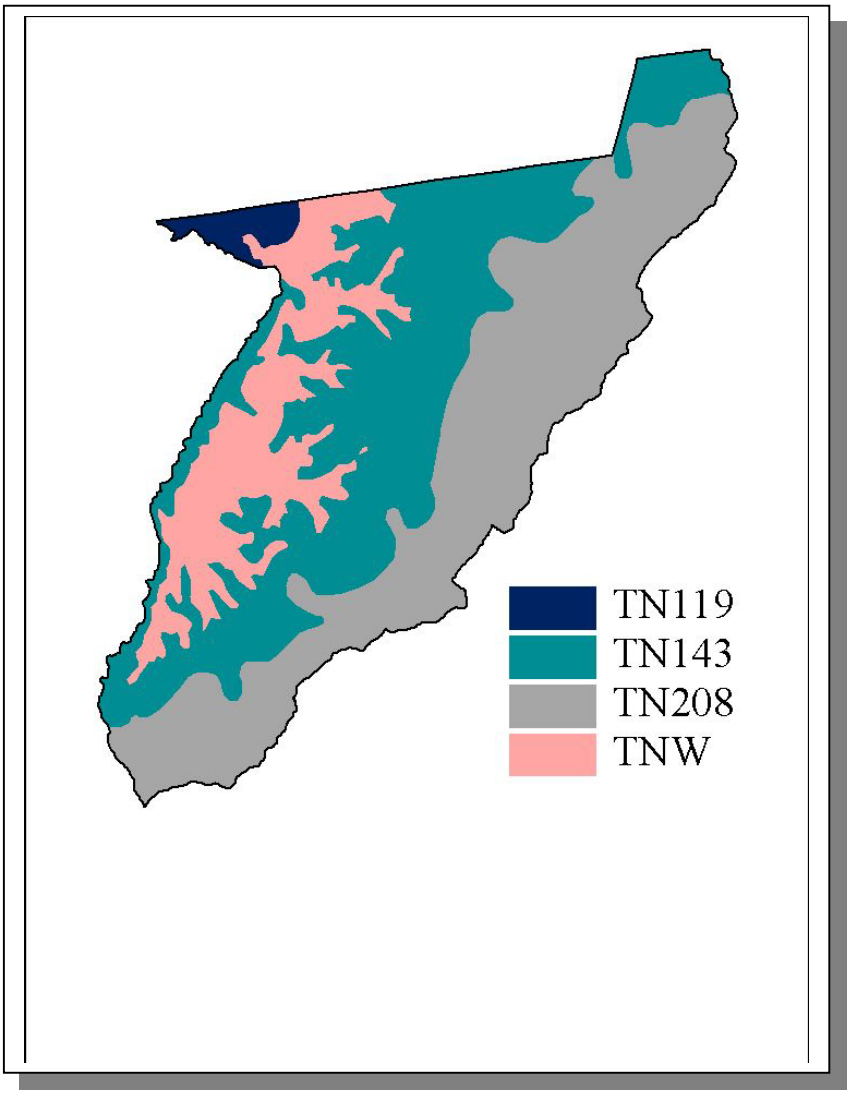

Figure 4-13. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010203. *TNW, lake area.*

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN119	0.00	C	1.08	5.15	Loam	0.33
TN143	0.00	C	1.22	6.44	Loam	0.32
TN208	0.00	C	4.02	4.84	Loam	0.25

Table 4-7. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010203. *More information is provided in SF Holston-Appendix IV.*

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Carter	51,505	53,132	0.07	37	38	2.7
Sullivan	143,596	150,371	13.63	19,566	20,489	4.7
Total	**195,101**	**203,503**		**19,603**	**20,527**	**4.7**

Table 4-8. Population Estimates in Subwatershed 0601010203.

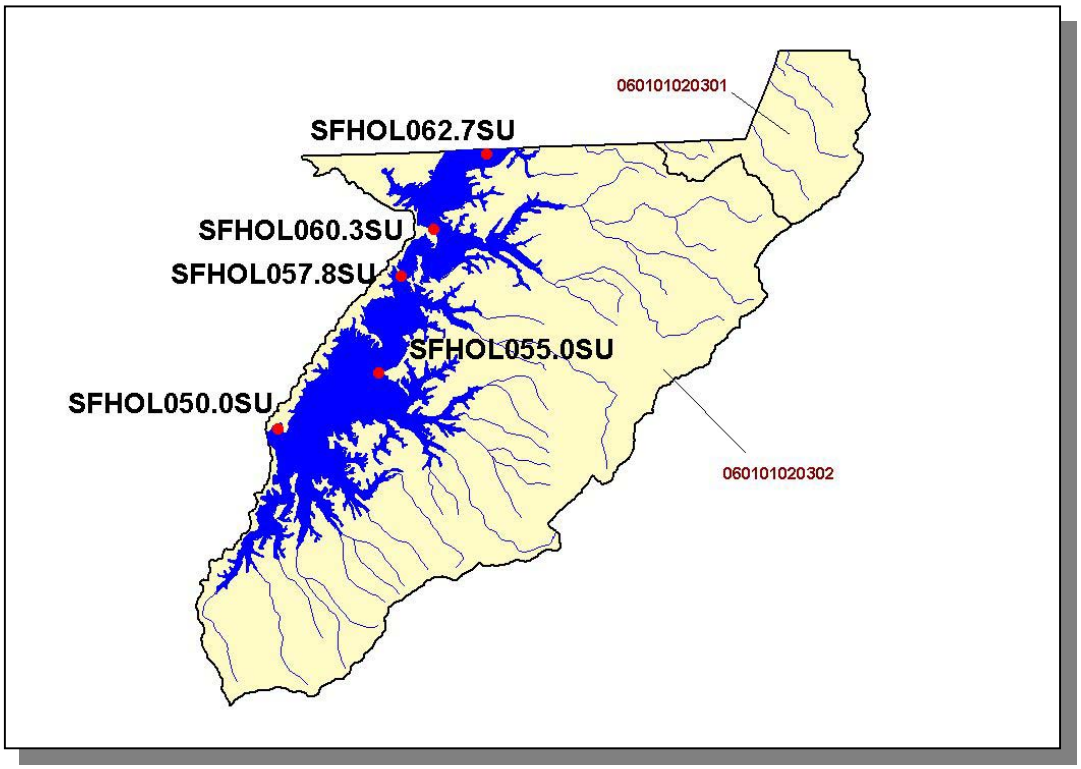

Figure 4-14. Location of Storet Monitoring Sites in Subwatershed 0601010203. *Subwatershed 060101020301 and 060101020302 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

4.2.B.ii. Point Source Contributions.

There are no point source contributions in this watershed.

4.2.B.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)				
Beef Cow	Cattle	Milk Cow	Hogs	Sheep
158	348	13	<5	<5

Table 4-9. Summary of Livestock Count Estimates in Subwatershed 0601010203. *According to the 1997 Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.*

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Carter	161.3	155.5	3.4	12.4
Johnson	144.4	144.4	0.6	2.2
Sullivan	123.7	123.7	0.1	0.3
Total	**429.4**	**423.6**	**4.1**	**14.9**

Table 4-10. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0601010203.

CROPS	TONS/ACRE/YEAR
Legume/Grass (Hayland)	0.16
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.35
Non Agricultural Land Use	0.00
Corn (Row Crops)	8.20
Tobacco (Row Crops)	3.67
Grass (Hayland)	0.42
Grass (Pastureland)	1.38
Grass, Forbs, Legumes (Mixed Pasture)	1.60
Other Land in Farms (Other Farmland)	0.02

Table 4-11. Annual Estimated Total Soil Loss in Subwatershed 0601010203.

4.2.C. 0601010204.

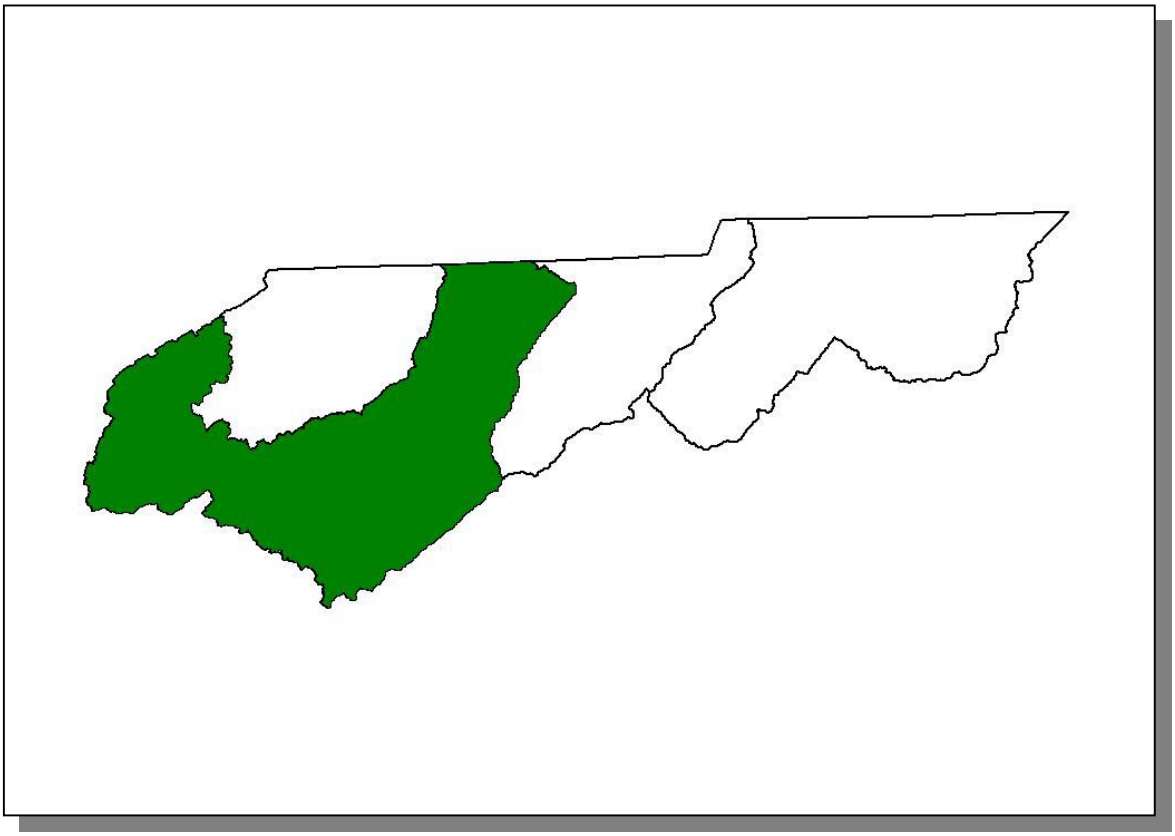

Figure 4-15. Location of Subwatershed 0601010204. *The Group 2 portion of the Tennesseee portion of the SF Holston HUC-10 subwatershed boundaries are shown for reference.*

4.2.C.i. General Description.

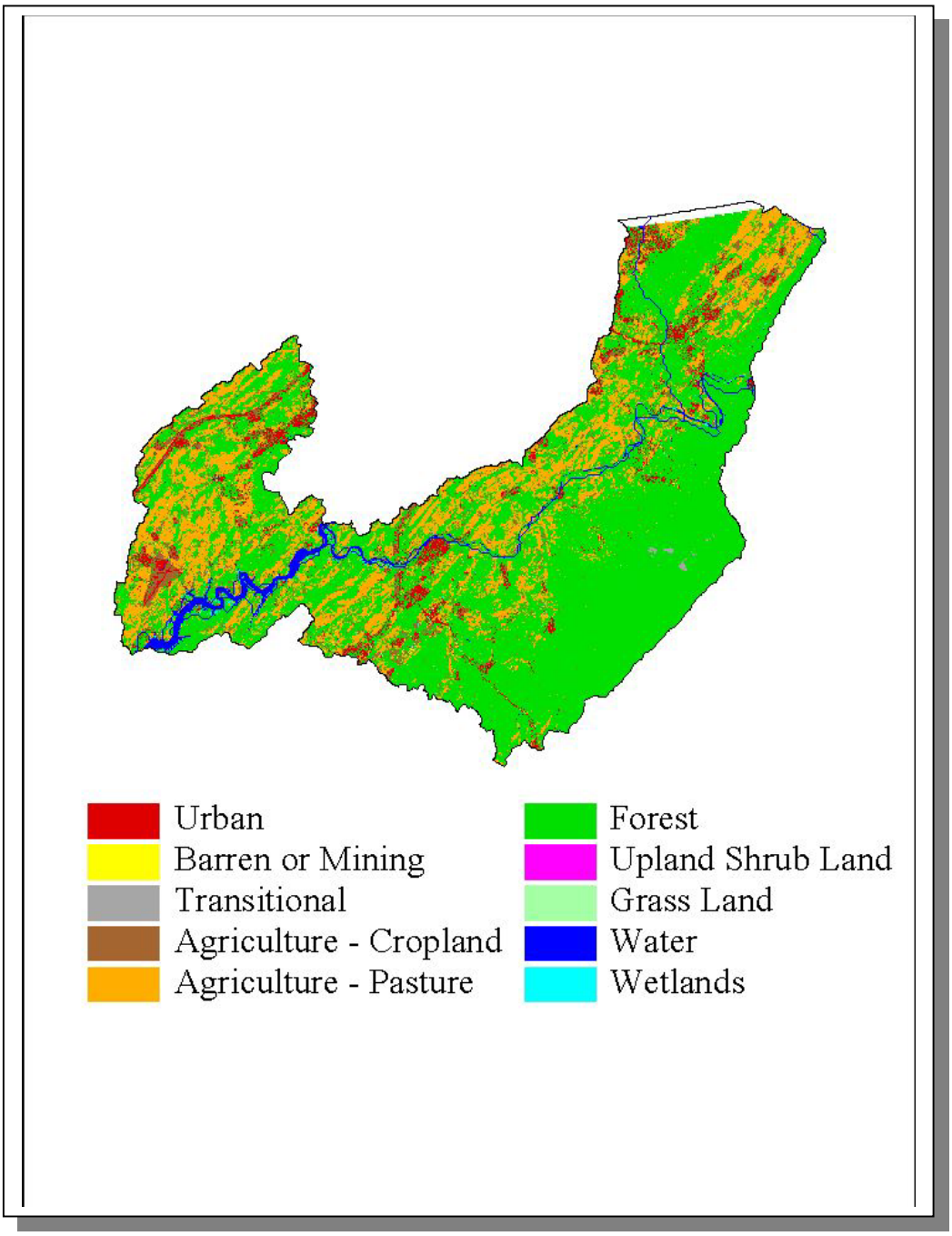

Figure 4-16. Illustration of Land Use Distribution in Subwatershed 0601010204.

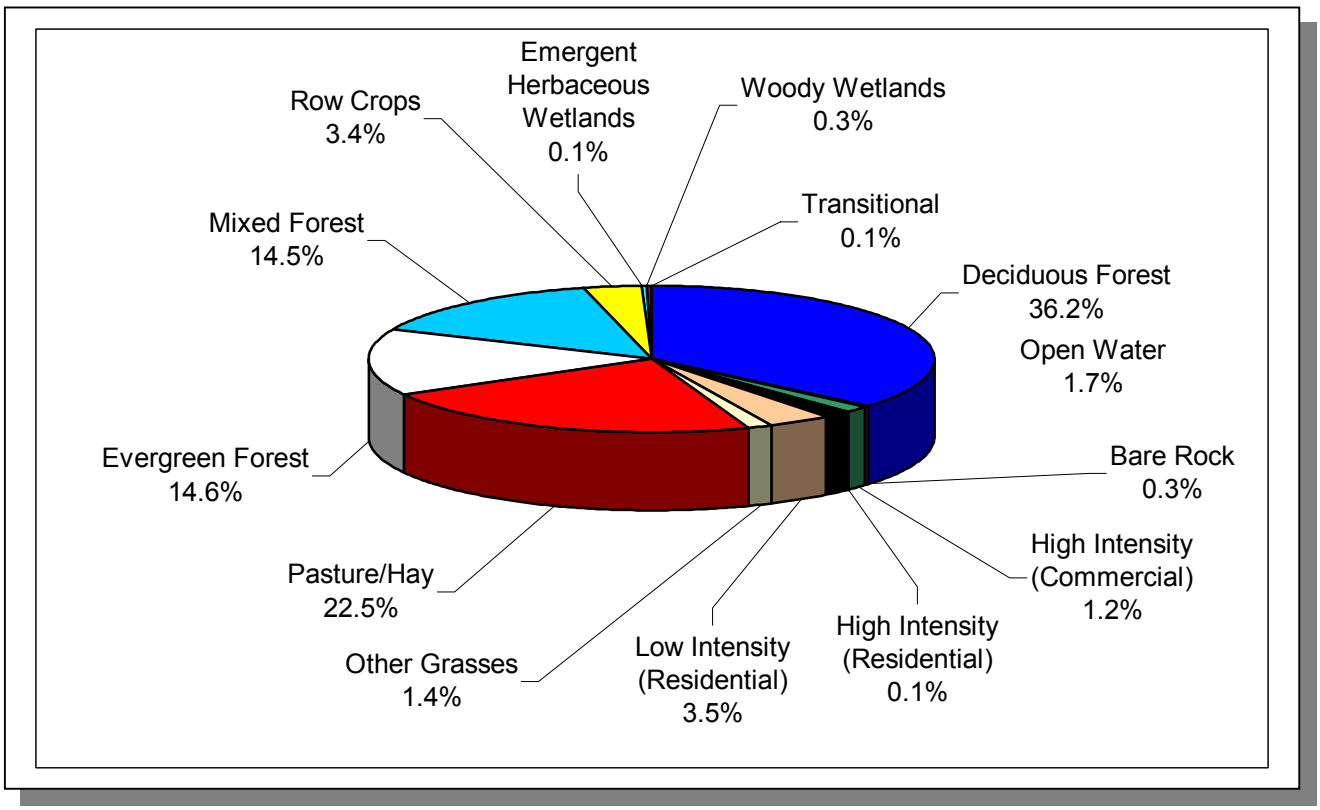

Figure 4-17. Land Use Distribution in Subwatershed 0601010204. *More information is provided in SF Holston-Appendix IV.*

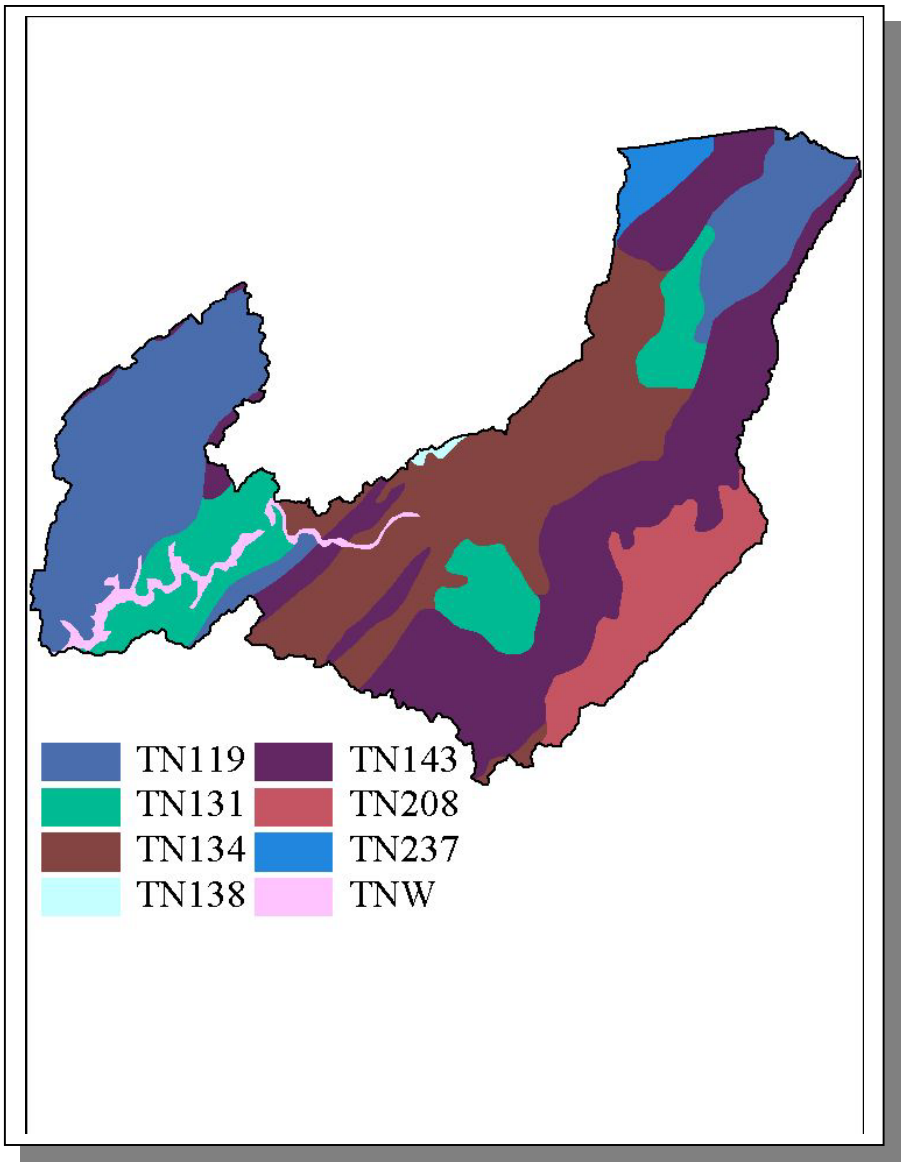

Figure 4-18. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010204. *TNW, lake area.*

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN119	0.00	C	1.08	5.15	Loam	0.33
TN131	0.00	C	1.17	4.95	Silty Loam	0.33
TN134	0.00	B	1.38	5.18	Loam	0.31
TN138	0.00	C	2.48	4.26	Sandy Loam	0.22
TN143	0.00	C	1.22	6.44	Loam	0.32
TN208	0.00	C	4.02	4.84	Loam	0.25
TN237	0.00	B	3.36	5.40	Silty Loam	0.32

Table 4-12. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010204. *More information is provided in SF Holston-Appendix IV.*

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Carter	51,505	53,132	2.63	1,353	1,395	3.1
Sullivan	143,596	150,371	31.31	44,963	47,085	4.7
Total	**195,101**	**203,503**		**46,316**	**48,480**	**4.7**

Table 4-13. Population Estimates in Subwatershed 0601010204.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Bluff City	Sullivan	1,394	608	447	155	6
Bristol	Sullivan	23,421	10,403	9,751	637	15
Total		**24,815**	**11,011**	**10,198**	**792**	**21**

Table 4-14. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0601010204.

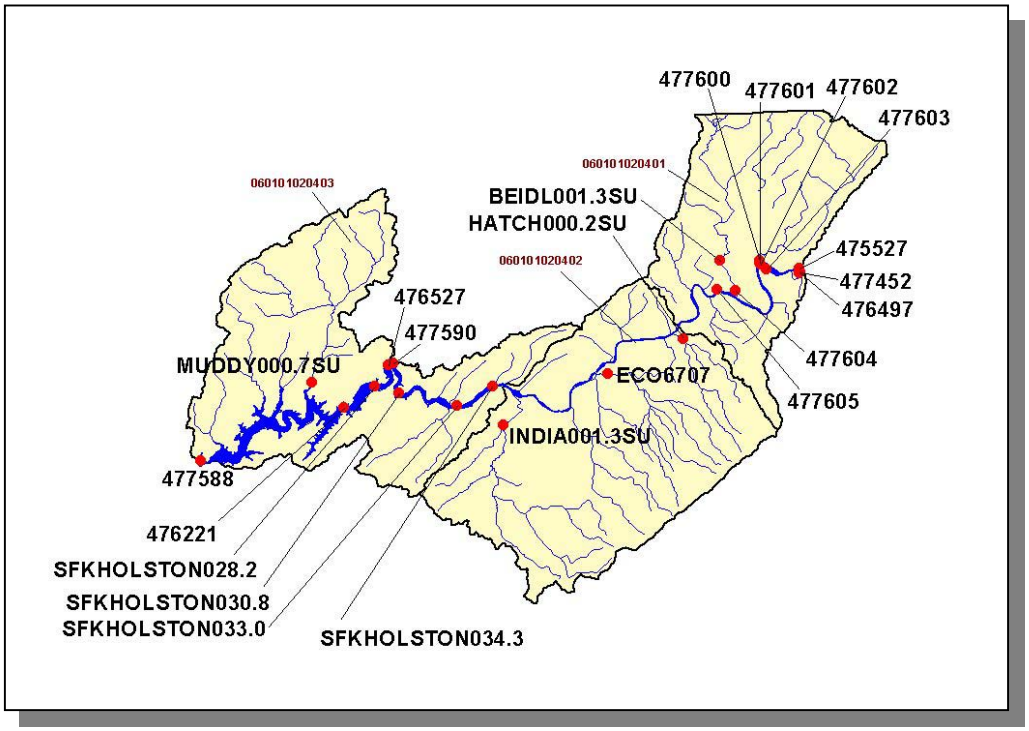

Figure 4-19. Location of Storet Monitoring Sites in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

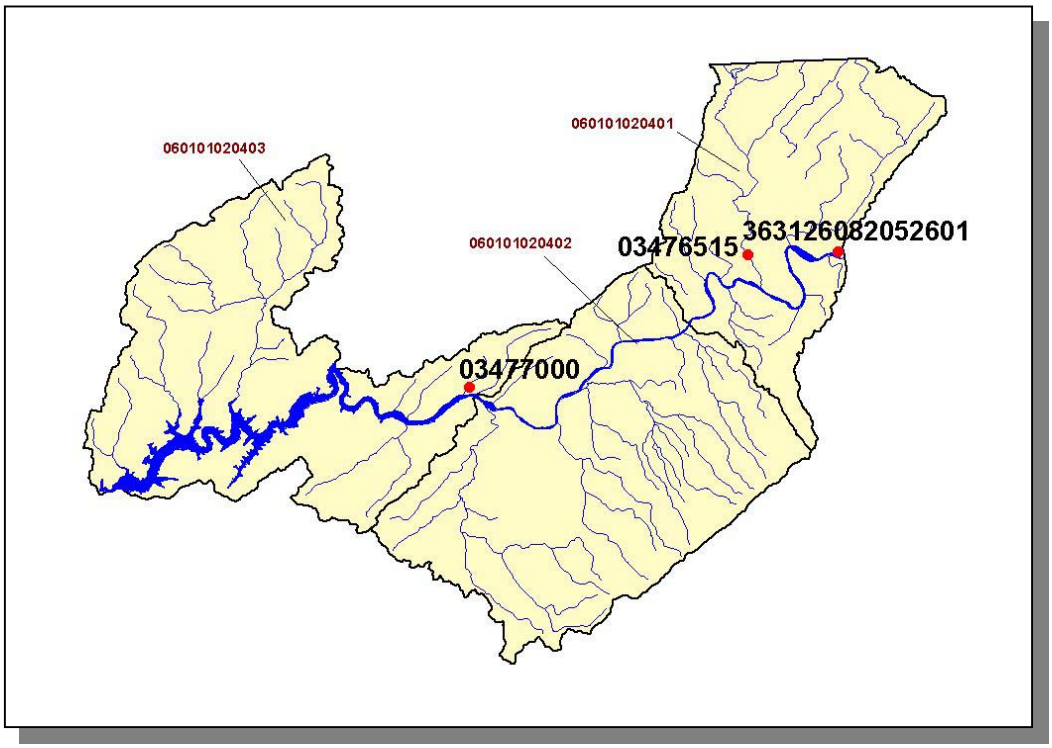

Figure 4-20. Location of Historical Streamflow Data Collection Sites in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

4.2.C.ii. Point Source Contributions.

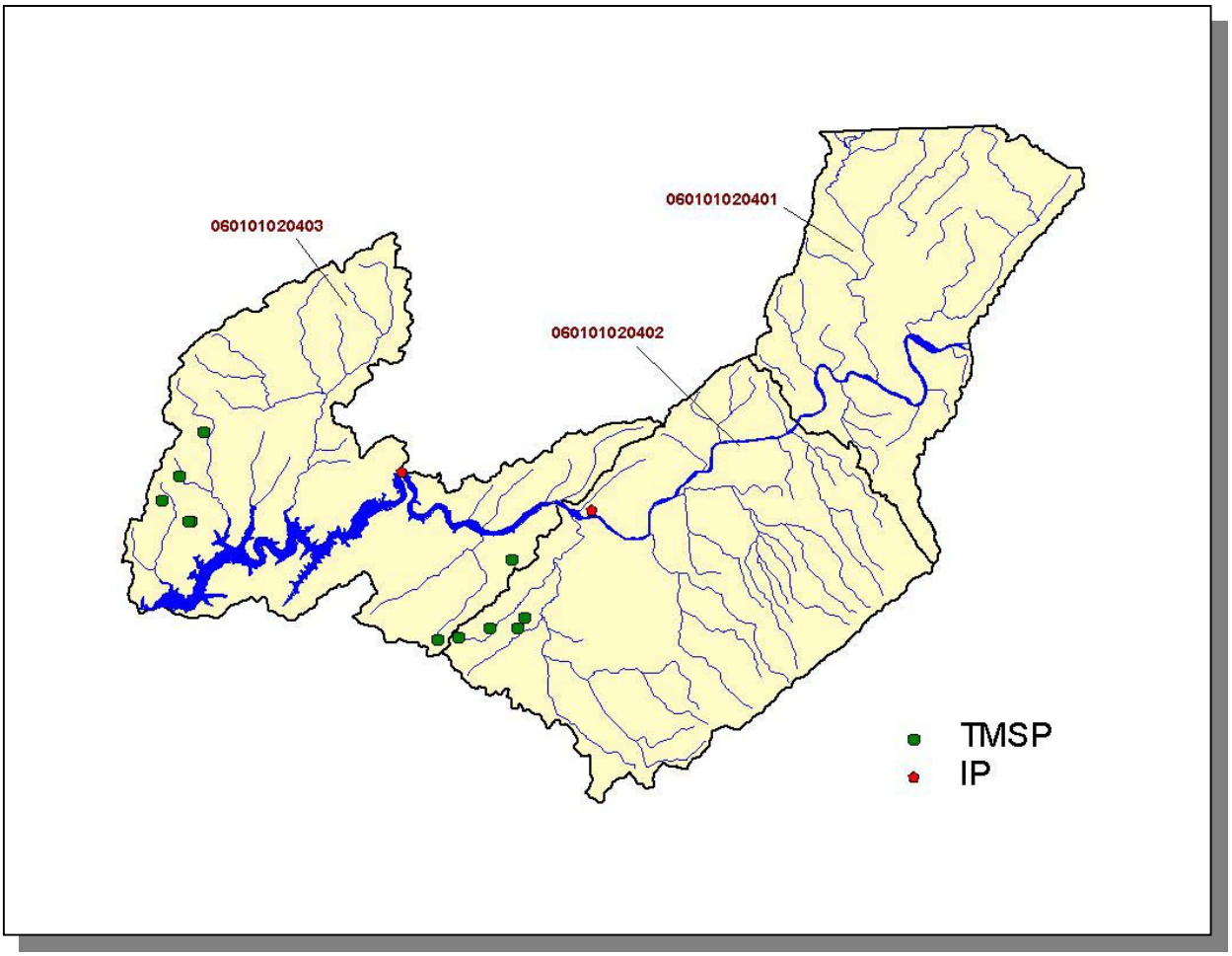

Figure 4-21. Location of Active Point Source Facilities in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. More information is provided in the following figures.*

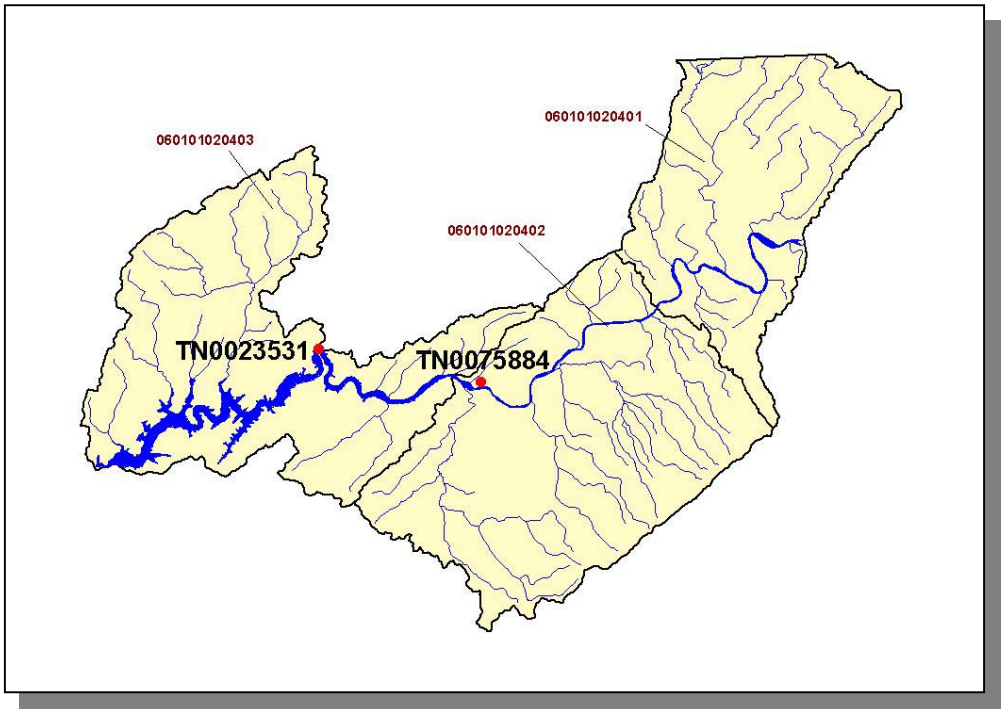

Figure 4-22. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. More information, including the names of facilities, is provided in SF Holston-Appendix IV.*

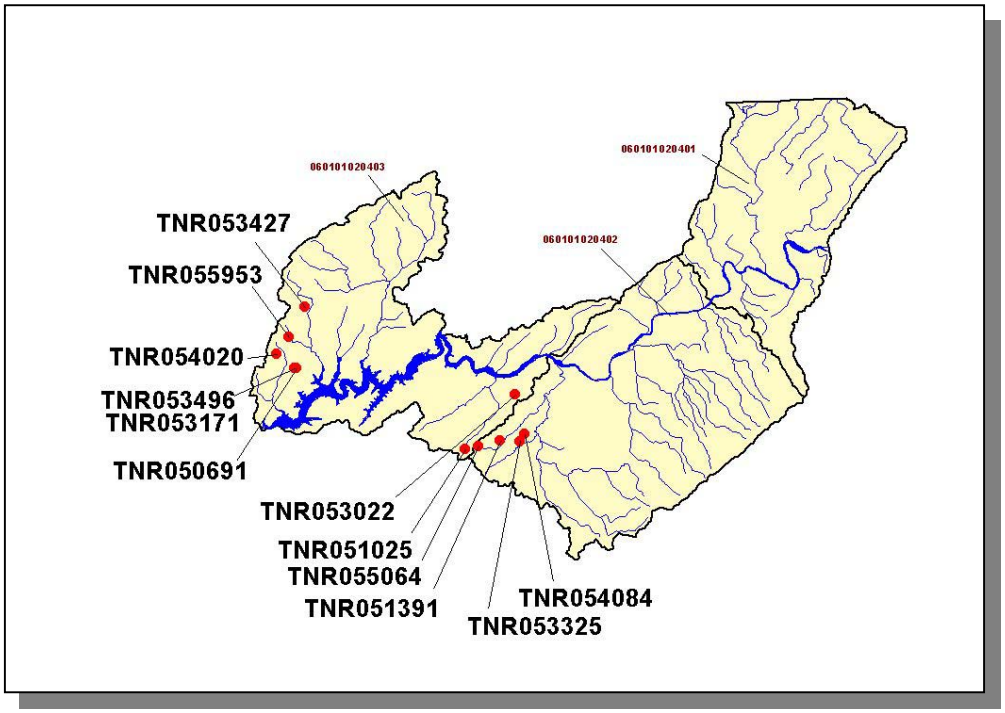

Figure 4-23. Location of TMSP Facilities in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. More information, including the names of facilities, is provided in SF Holston-Appendix IV.*

4.2.C.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List

There is one NPDES facility discharging to a water body listed on the 1998 303(d) list in Subwatershed 0601010204:

- TN0023531 (Bristol STP #2) discharges to Boone Reservoir (South Fork Holston River @ RM 29.6).

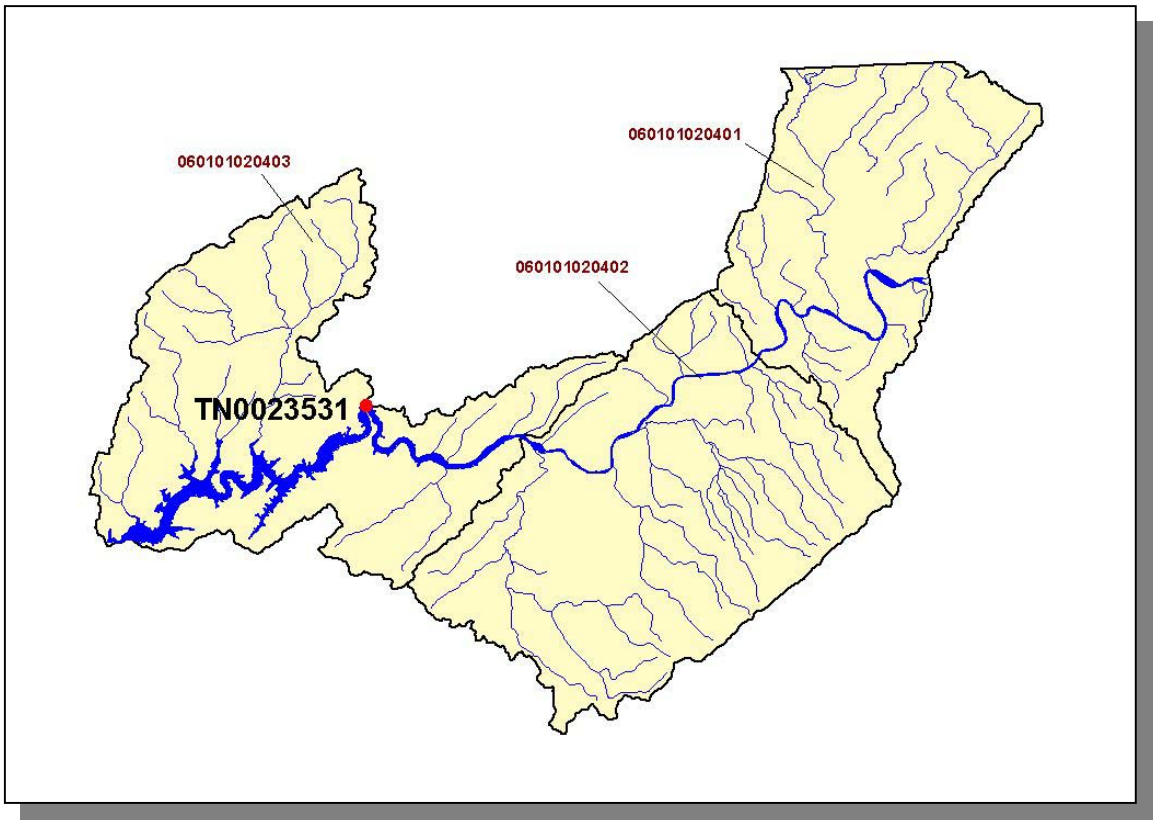

Figure 4-24. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 0601010204. *Subwatershed 060101020401, 060101020402, and 060101020403 boundaries are shown for reference. The names of facilities are provided in SF Holston-Appendix IV.*

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0023531	77.56	84.67	89.84	71.42	15.00000

Table 4-15. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010204. *Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.*

PERMIT #	TDS	P	NH_3
TN0023531	X	X	X

Table 4-16. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010204. *TDS, Total Dissolved Solids.*

PERMIT #	WET	FECAL	TRC	TSS	SETTLEABLE SOLIDS	BOD	CN^-	DO	pH
TN0023531	X	X	X	X	X	X	X	X	X

Table 4-17. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010204. *Wet, Whole Effluent Toxicity; trc, total residual Chlorine; TSS, Total Suspended Solids, BOD, Biochemical Oxygen Demand.*

4.2.C.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)					
Beef Cow	Cattle	Milk Cow	Chickens	Hogs	Sheep
5,986	13,235	490	16	46	32

Table 4-18. Summary of Livestock Count Estimates in Subwatershed 0601010204. *According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.*

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Carter	161.3	155.5	3.4	12.4
Sullivan	123.7	123.7	0.1	0.3
Totals	**285.0**	**279.2**	**3.5**	**12.7**

Table 4-19. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0601010204.

CROPS	TONS/ACRE/YEAR
Nonagricultural Land Use	0.00
Grass (Hayland)	0.42
Legume/Grass (Hayland)	0.16
Grass (Pastureland)	1.30
Grass, Forbs, Legumes (Mixed Pasture)	1.51
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.36
Corn (Row Crops)	8.20
Tobacco (Row Crops)	4.35
Other Land in Farms	0.02

Table 4-20. Annual Estimated Total Soil Loss in Subwatershed 0601010204.

4.2.D. 0601010205.

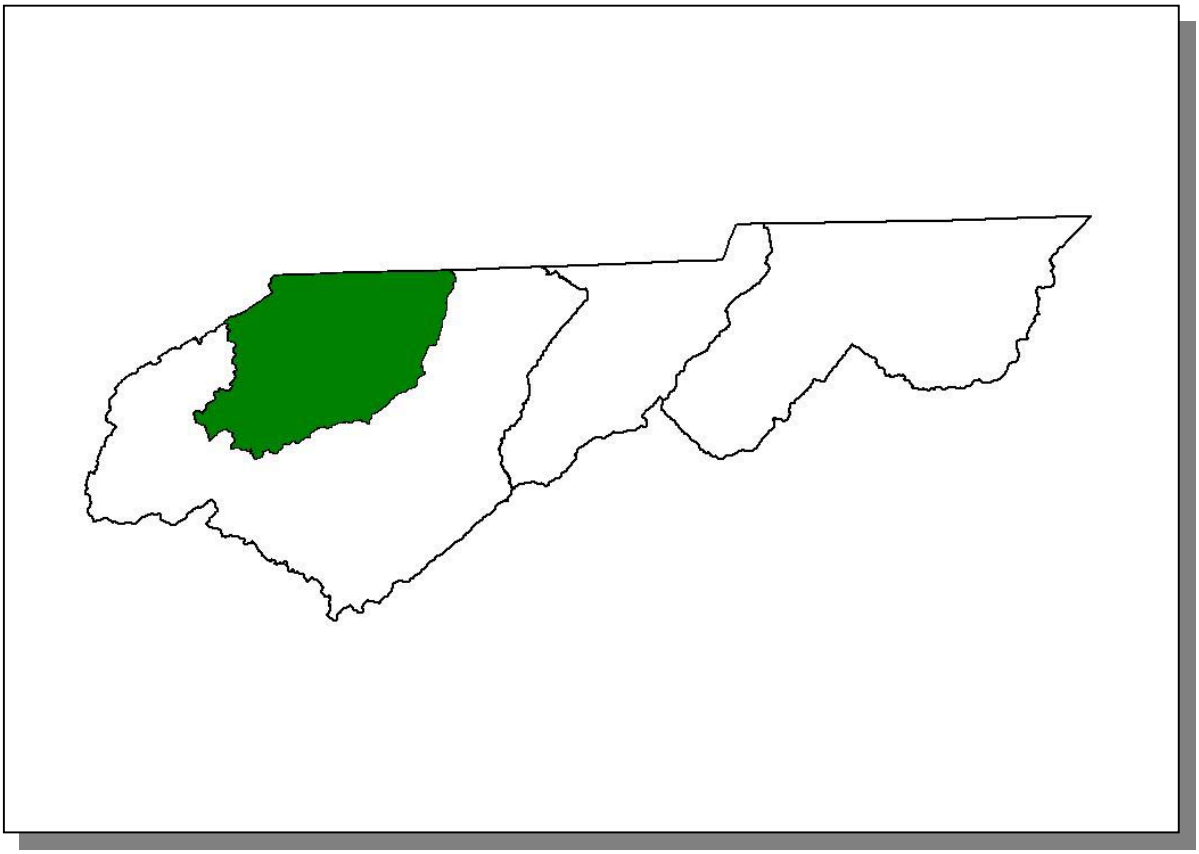

Figure 4-25. Location of Subwatershed 0601010205. *The Group 2 portion of the Tennessee portion of the SF Holston HUC-10 subwatershed boundaries are shown for reference.*

4.2.D.i. General Description.

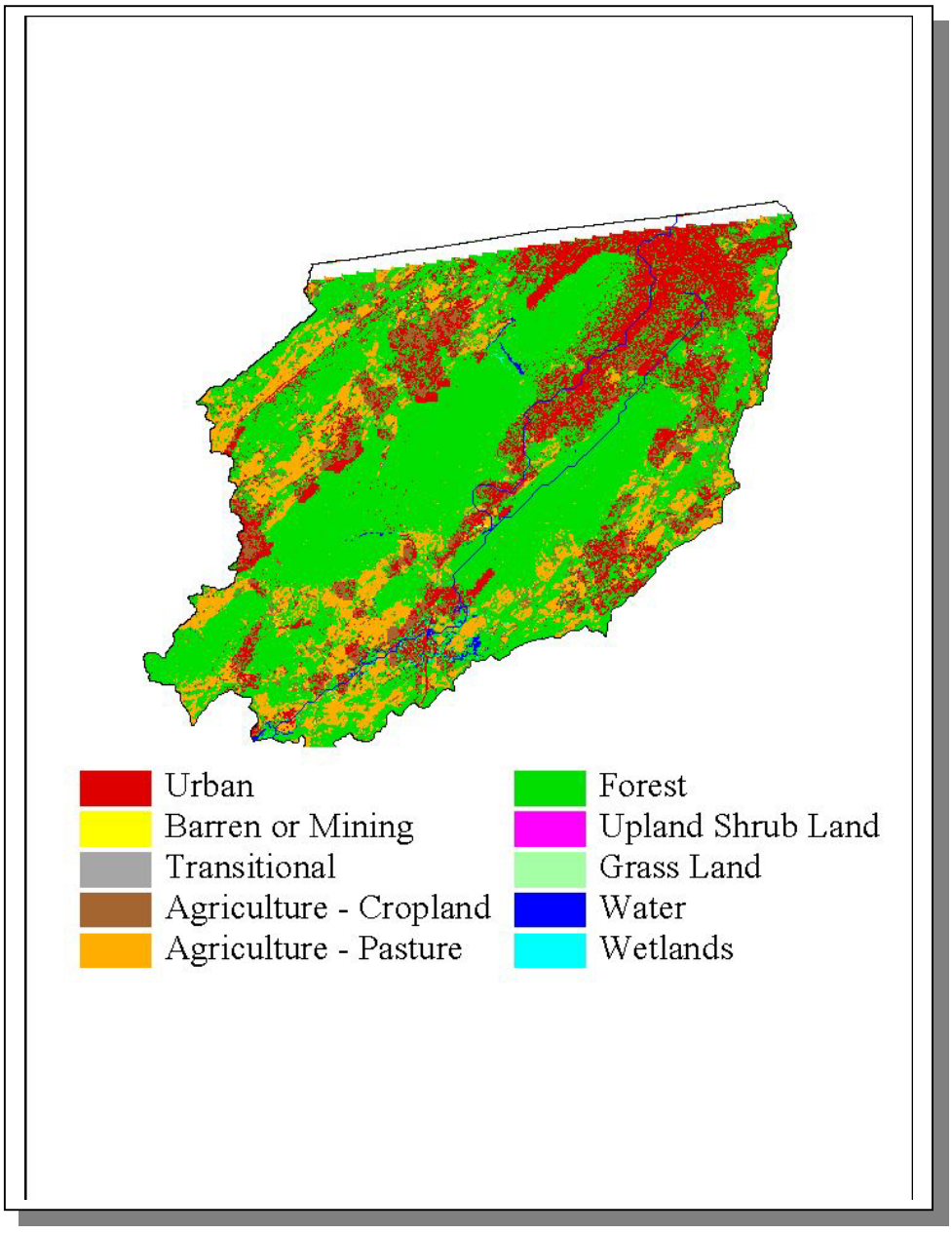

Figure 4-26. Illustration of Land Use Distribution in Subwatershed 0601010205.

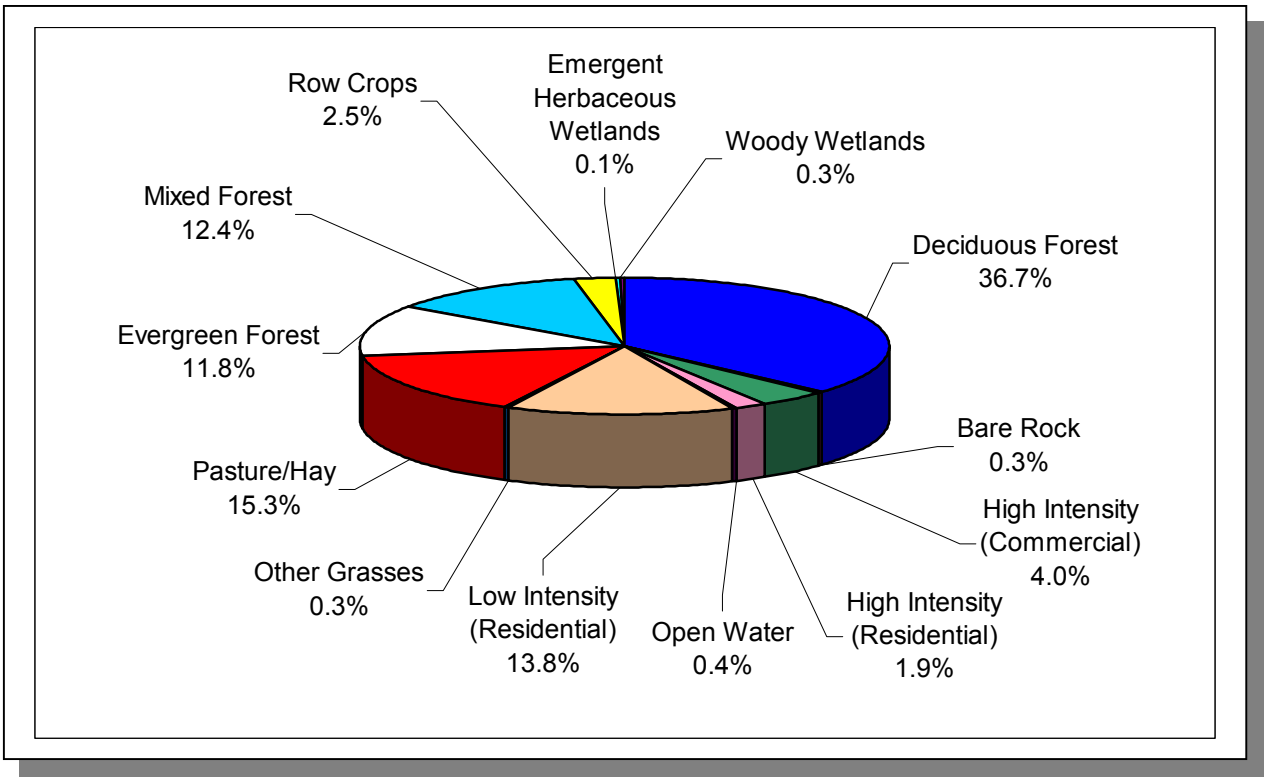

Figure 4-27. Land Use Distribution in Subwatershed 0601010205. *More information is provided in SF Holston-Appendix IV.*

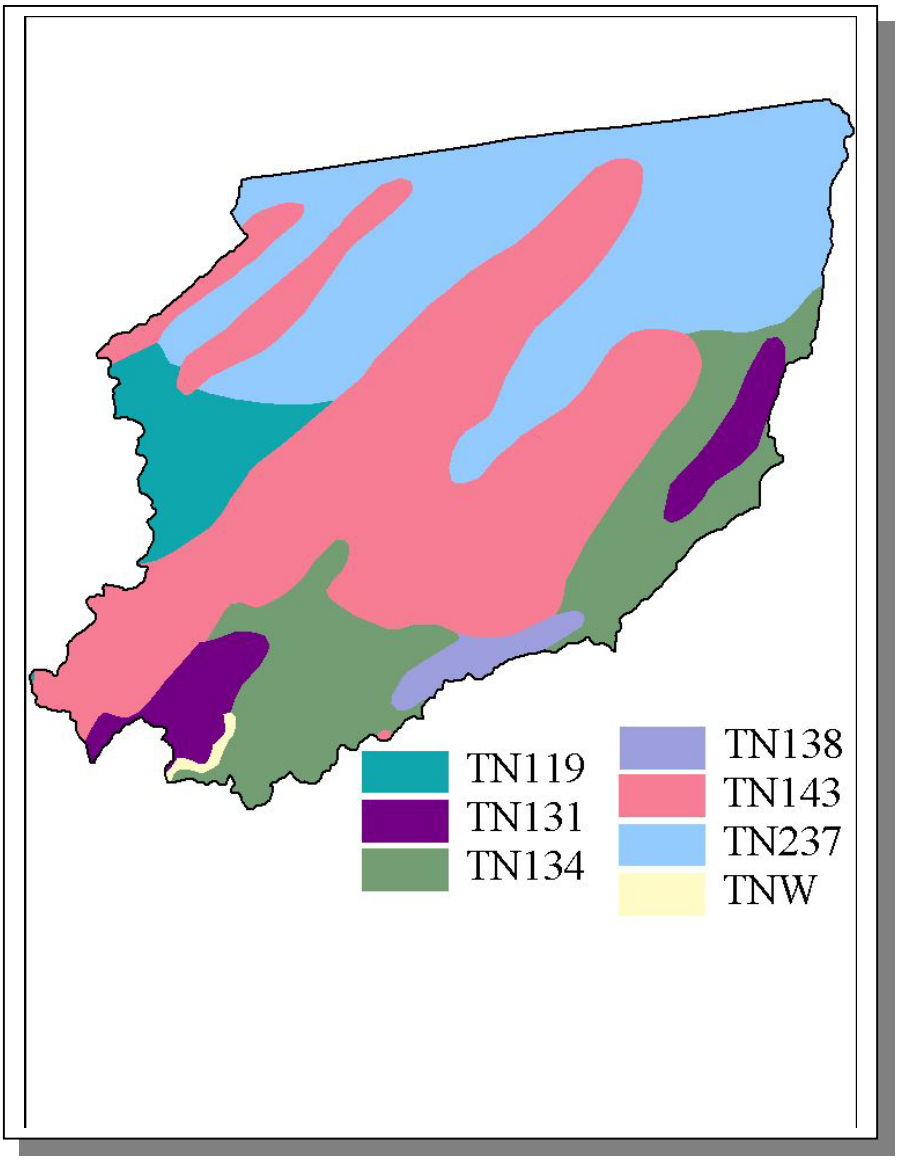

Figure 4-28. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601010205. *TNW, lake area.*

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN119	0.00	C	1.08	5.15	Loam	0.33
TN131	0.00	C	1.17	4.95	Silty Loam	0.33
TN134	0.00	B	1.38	5.18	Loam	0.31
TN138	0.00	C	2.48	4.26	Sandy Loam	0.22
TN143	0.00	C	1.22	6.44	Loam	0.32
TN237	0.00	B	3.36	5.40	Silty Loam	0.32

Table 4-21. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601020205. *More information is provided in SF Holston-Appendix IV.*

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Sullivan	143,596	150,371	13.25	19,028	19,925	4.7

Table 4-22. Population Estimates in Subwatershed 0601010205.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Bristol	Sullivan	23,421	10,403	9,751	637	15

Table 4-23. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0601010205.

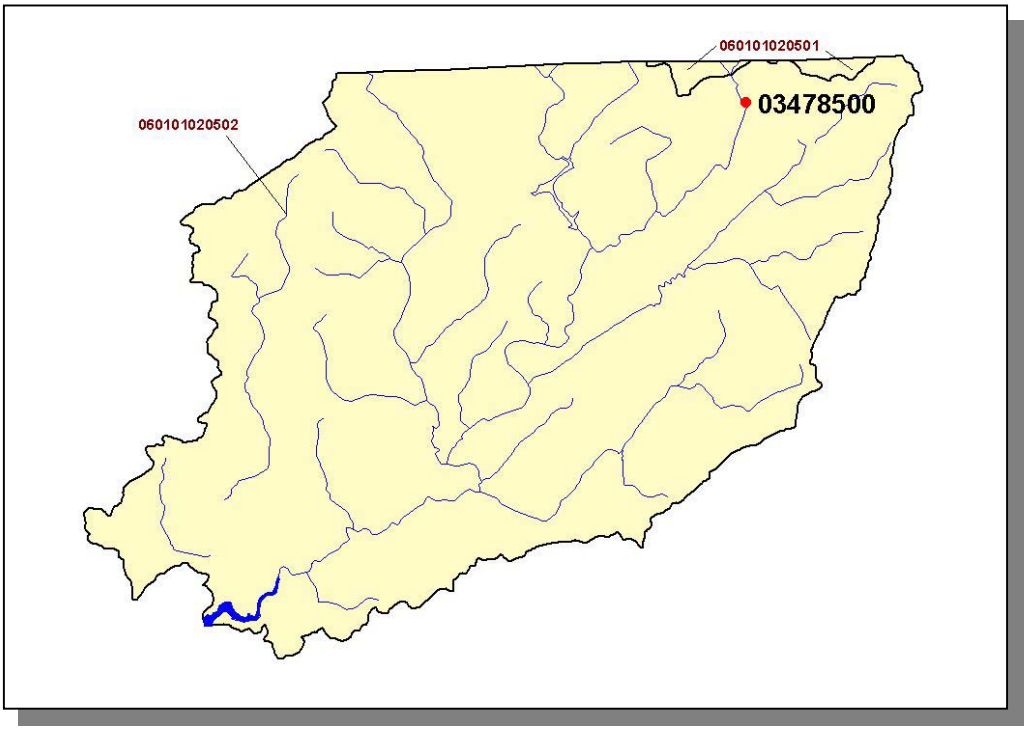

Figure 4-29. Location of Historical Streamflow Data Collection Sites in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

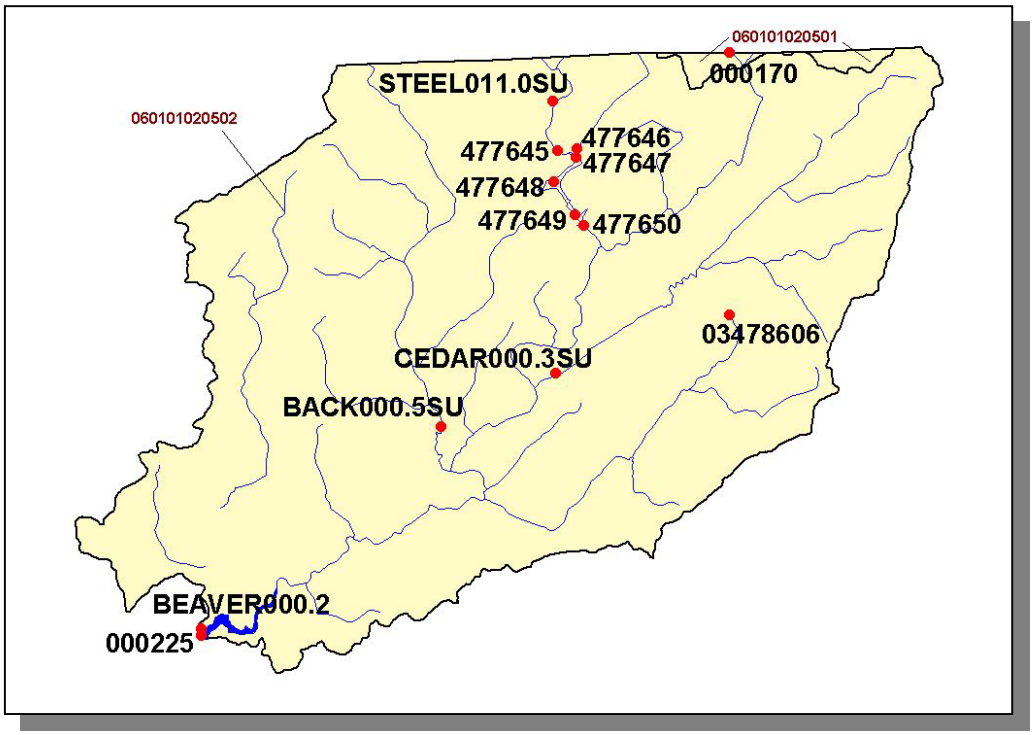

Figure 4-30. Location of STORET Monitoring Sites in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

4.2.D.ii. Point Source Contributions.

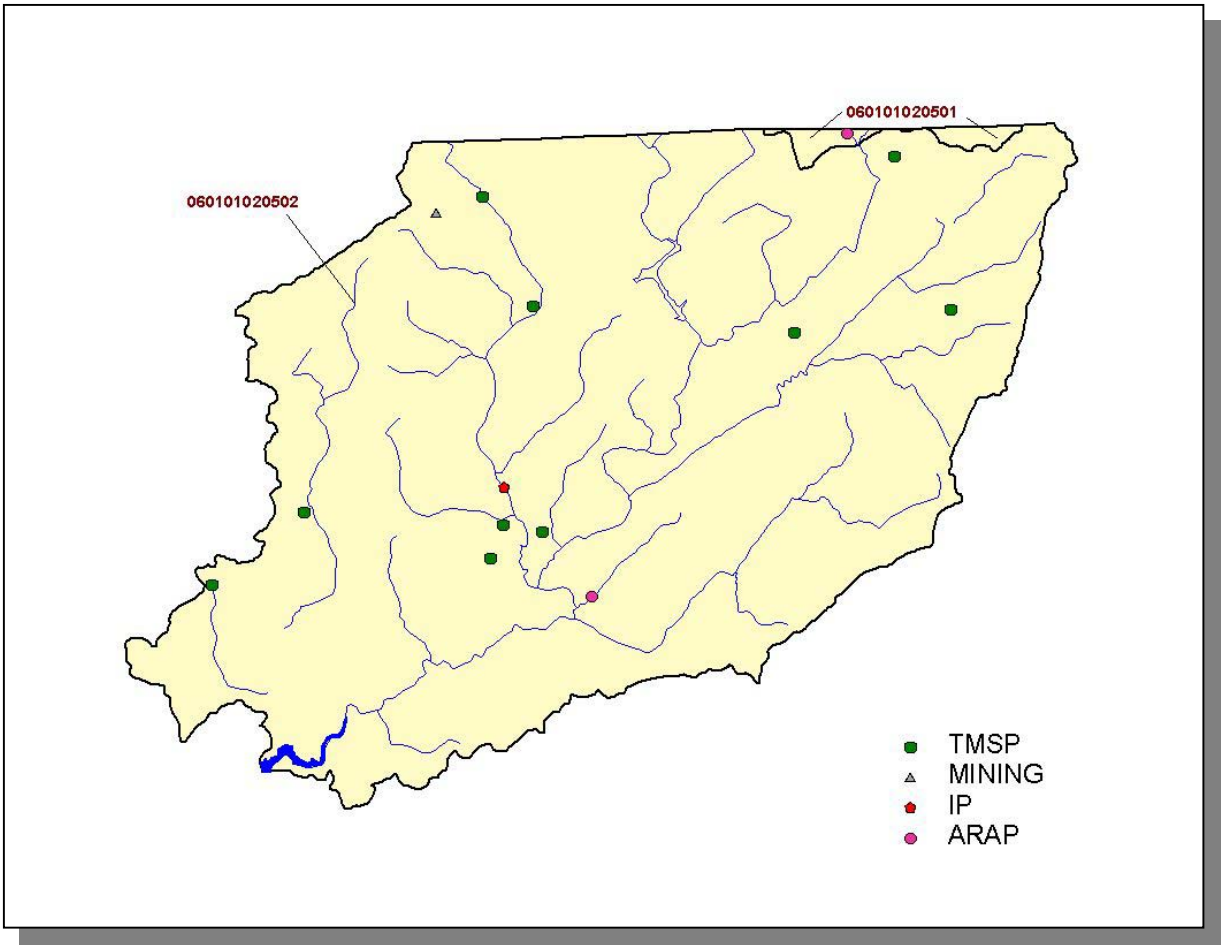

Figure 4-31. Location of Active Point Source Facilities in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in the following figures.*

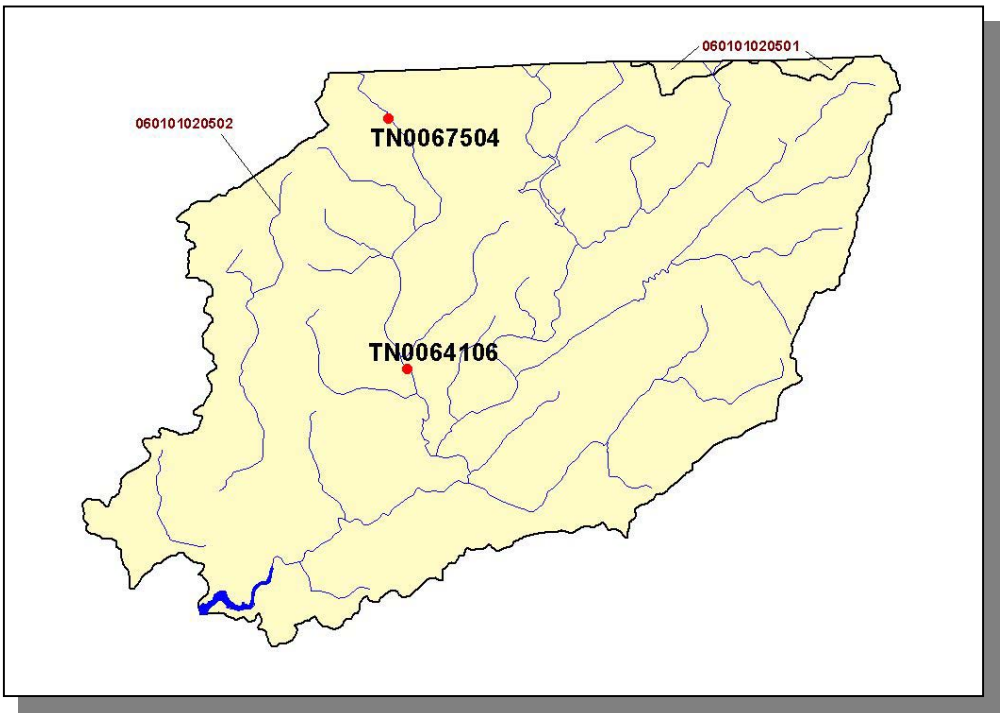

Figure 4-32. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

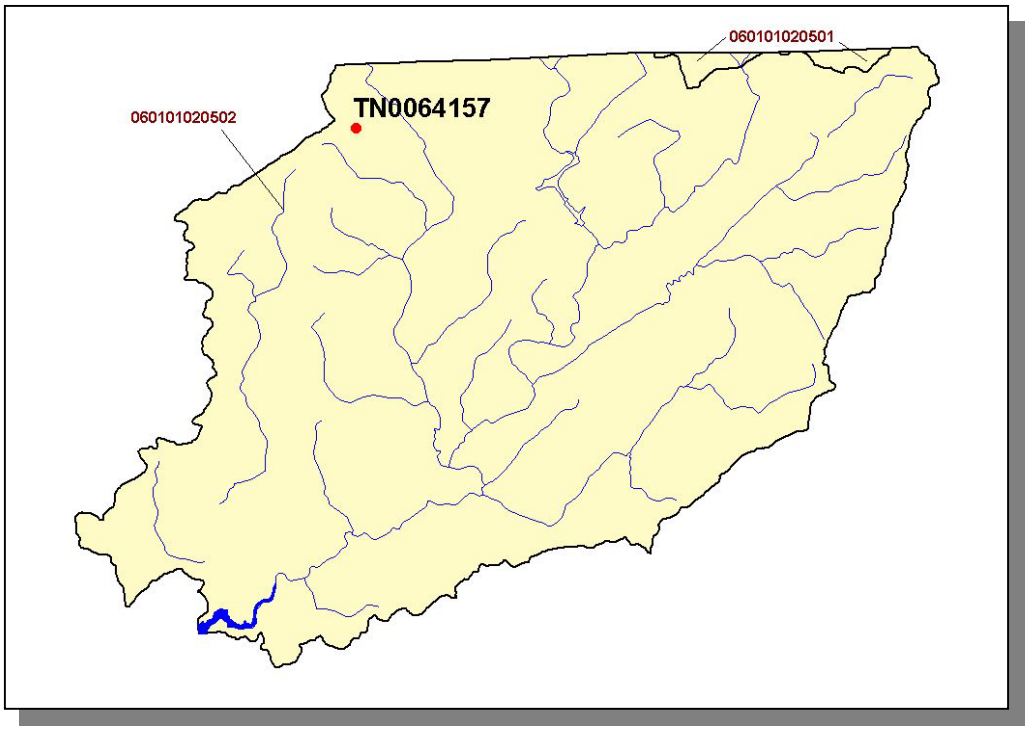

Figure 4-33. Location of Active Mining Sites in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

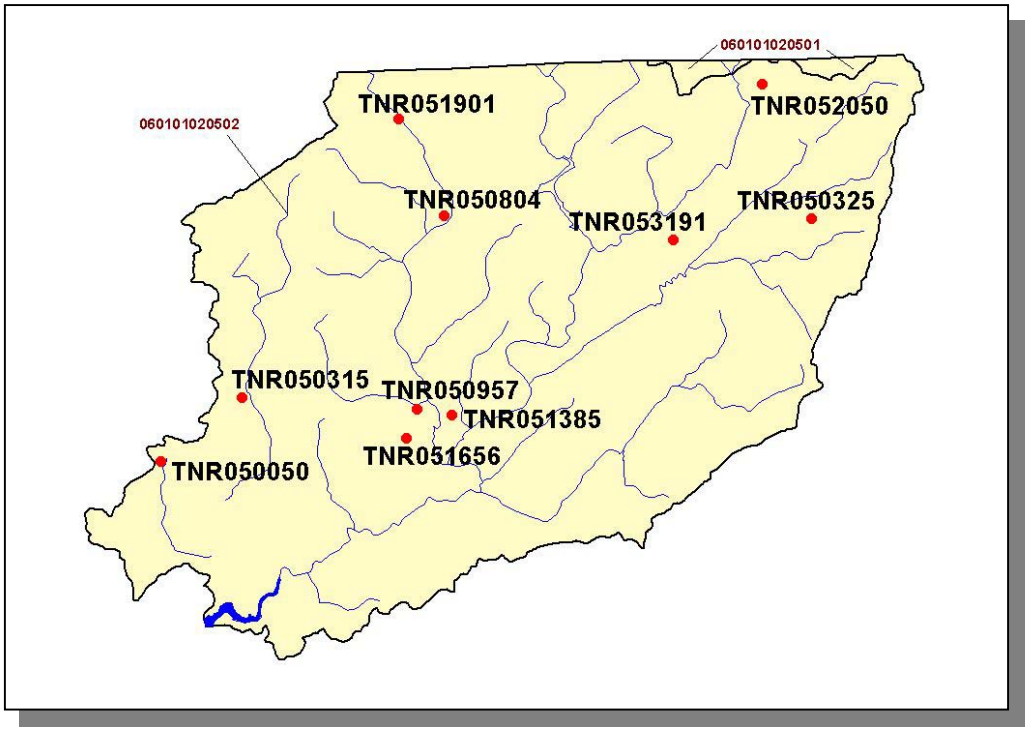

Figure 4-34. Location of TMSP Facilities in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

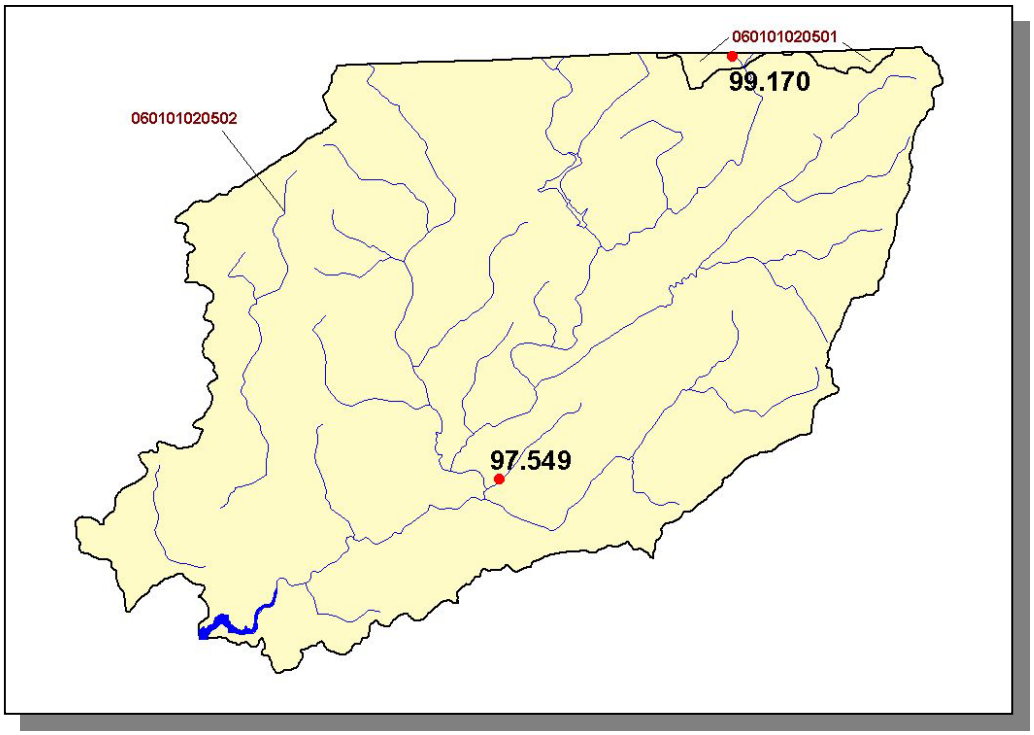

Figure 4-35. Location of ARAP Sites (Individual Permits) in Subwatershed 0601010205. *Subwatershed 060101020501 and 060101020502 boundaries are shown for reference. More information is provided in SF Holston-Appendix IV.*

4.2.D.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List

There are two NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 0601010205:

- TN0064106 (Unisys Corp.-Earhart Site) discharges to an unnamed trib of Back Creek @ RM 1.4
- TN0067504 (Maymead Materials) discharges to an unnamed trib of back Creek @ RM 5.5

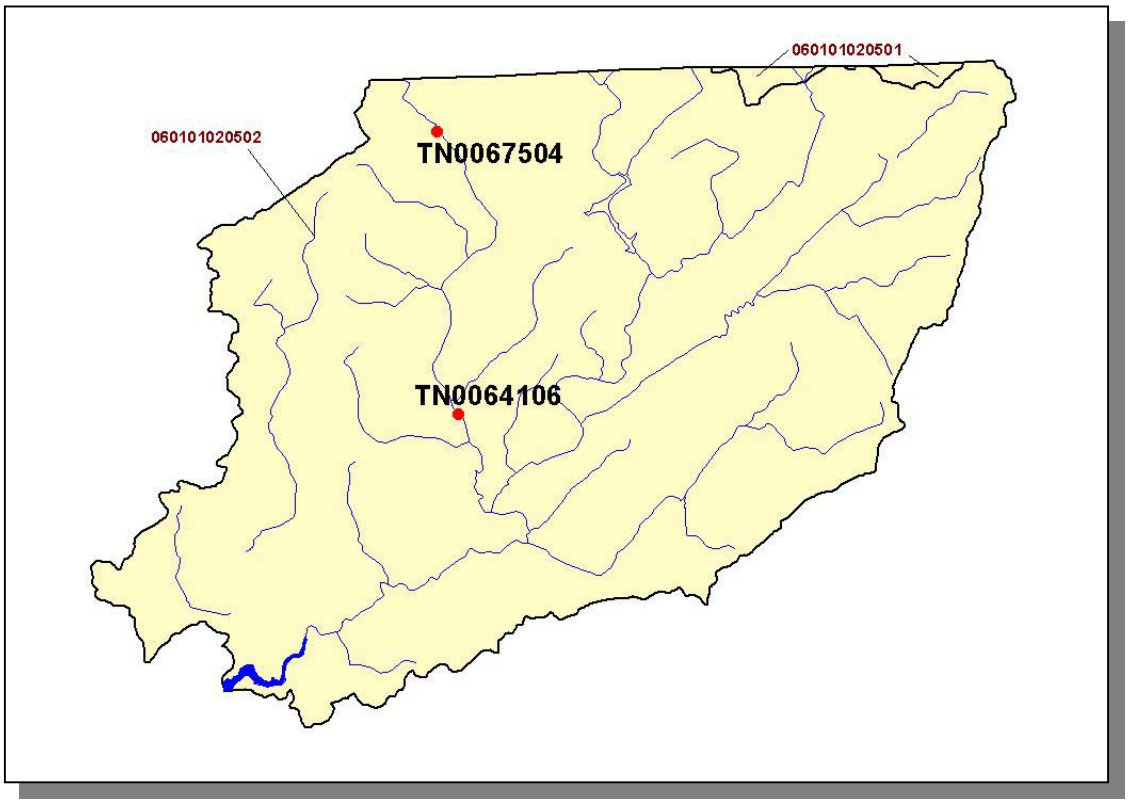

Figure 4-36. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 0601010205. *Subwatershed 060101020501, and 060101020502 boundaries are shown for reference. The names of facilities are provided in SF Holston-Appendix IV.*

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0064106					0.10100
TN0065504					0.03500

Table 4-24. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010205. *Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.*

PERMIT #	WET	TSS	pH
TN0064106	X	X	X
TN0067504			X

Table 4-25. Inorganic Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010205. *Wet, Whole Effluent Toxicity; TSS, Total Suspended Solids.*

PERMIT #	OIL and GREASE	1,2-DICHLOROBENZENE	TOLUENE
TN0064106		X	X
TN0067504	X		

Table 4-26. Organic Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010205.

PERMIT #	75-34-3	75-35-4	156-60-5	79-34-5	71-55-6	79-01-6	127-18-4
TN0064106	X	X	X	X	X	X	X

Table 4-27. Chlorinated Ethanes Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0601010205. *CAS (Chemical Abstract System) Codes: 75-34-3, 1,1-Dichloroethane; 75-35-4, 1,1-Dichloroethene; 156-60-5, 1,2-trans-Dichloroethene; 79-34-5, Tetrachloroethane; 71-55-6, 1,1,1-Trichloroethane; 79-01-6, Trichloroethene; 127-18-4, Tetrachloroethene.*

4.2.D.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)					
Beef Cow	Milk Cow	Cattle	Chickens	Hogs	Sheep
1,563	126	3,447	<5	12	8

Table 4-28. Summary of Livestock Count Estimates in Subwatershed 0601010205. *According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.*

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Sullivan	123.7	123.7	0.1	0.3

Table 4-29. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0601010205.

CROPS	TONS/ACRE/YEAR
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.35
Non Agricultural Land Use	0.00
Corn (Row Crops)	8.20
Tobacco (Row Crops)	3.62
Grass (Hayland)	0.42
Legume/Grass (Hayland)	0.16
Grass (Pastureland)	1.39
Grass, Forbs, Legumes (Mixed Pasture)	1.61
Other Land in Farms	0.02

Table 4-30. Annual Soil Loss in Subwatershed 0601010205.